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CONTENTS
September 2008

On the Covers
This month, *Macworld* is running two covers: on the left is this month's cover on the newsstand (photography by Peter Belanger); on the right, the subscriber version (iPhone photograph courtesy of Apple).

OPINION

11 From the Editor's Desk
The iPhone and its OS may have hit version 2.0. But the App Store is definitely at 1.0.

16 Feedback
Readers respond.

MACUSER

22 Macs Making Inroads in the Enterprise Market
Developers feel they can help get Macs accepted in large businesses.

26 Apple Notebook Shipments Up 61 Percent
Growth puts company in seventh place worldwide for laptops.

30 Rhapsody Joins the DRM-Free Bandwagon
Subscription-based music service starts selling MP3s to compete with iTunes.

34 Hot Stuff
Check out the cool stuff we're into right now.

REVIEWS

36 The iCal Challenge
iCal is the standard against which every other calendar, organizer, and to-do list competes, and in that spirit, we take eight of its popular rivals for a test drive to see how they compare.

44 macworld.com/reviews
We're constantly reviewing the latest Mac hardware and software on Macworld.com. Here are quick summaries of this month's online exclusives.

48 Top Products
Looking for a new printer, monitor, digital camera, or other hardware? Check out our current favorites, as well as a complete listing of all current Macs and iPods.

CONTENTS September 2008

FEATURES

50 Software Treasures
From handy time-savers to multimedia power tools, stock up on 53 great Mac programs that won't empty your coffers.

60 iPhone 2.0
We put the new iPhone 3G and its upgraded software to the test and take a sneak peek at some of the most promising new iPhone applications.

SECRETS

72 Working Mac
Troubleshoot and optimize Safari and Firefox: keep track of multiple tabs, navigate your bookmarks, and deal with pages that just won't load.

76 Playlist
All kinds of audio streams through your Mac. With the right software, you can capture those sounds.

78 Recording Studio
Find the right guitar for your Mac-based recording projects.

82 Create
We've got some tricks for making sure your charts and graphs don't bore your audience.

86 Mobile Mac
Here's a guide to some of the kinds of cards you can get to fill your MacBook Pro's ExpressCard/34 slot.

90 Geek Factor
Check out our tips for taking control of Time Machine backups, program preferences, and RSS feeds.

HELP DESK

94 Mac OS X Hints
Scroll horizontally with an older mouse, use a spring-loaded path bar in the Finder, put displays to sleep with the keyboard, and more.

98 Mac 911
Master DVD region encoding, alphabetize Firefox bookmarks, move Mail accounts offline, and more.

BACK PAGE

120 Spotlight
Dan Moren says that predicting Apple's next move is a game for suckers.

60 iPhone 2.0

MACWORLD.COM'S TOP 5

The top 5 stories on Macworld.com are:

1 WWDC 2008 Keynote—Live Update
Check out our live update of Steve Jobs's WWDC keynote address, where he unveiled the iPhone 3G (macworld.com/3721).

2 Hands On with iPhone 3G
At Apple's WWDC, Jason Snell briefly gets his hands on an iPhone 3G and reports on the experience (macworld.com/3722).

3 Essential Mac Maintenance: Get Set Up
In the first part of our three-part series, Dan Frakes shares simple ways to keep your Mac in tip-top shape (macworld.com/3723).

4 Automating Word with AppleScript
Joe Kissell shows you how to replace Visual Basic macros with AppleScripts in Word 2008 (macworld.com/3683).

5 Apple Confirms OS X Snow Leopard
During the WWDC keynote address, Steve Jobs also revealed the next-generation Mac OS (macworld.com/3724).

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 By Jason Snell

When 2.0 Is Really 1.0

Apple may have updated the iPhone. But the App Store is brand-new—and it shows.

Apple has released a major update to the iPhone, including a second generation of the iPhone hardware and a new version of the operating system that runs both it and the iPod touch (see "iPhone 2.0," page 60). Yet for all this talk of second-generation this and updated that, one of the most vital components of the new iPhone is still at version 1.0.

With the release of the updated iPhone software, Apple flung open the doors of its App Store, where users can buy third-party programs for their iPhones and iPod touches. On its first day, the App Store had some 500-plus programs available, and that number is growing rapidly.

It's exciting to witness the birth of a new software ecosystem. But it's also scary. If some people were skittish about buying the first-generation iPhone, how should they feel about more than 500 programs, all at version 1.0, on a device that has never before supported non-Apple software?

For Beta or Worse

Over the years, programmers have come up with some solid methods for making sure that even the initial releases of their software are relatively stable. Unfortunately, many of those methods weren't available for the first generation of App Store programs.

Take beta testing—users try out early program versions and discover bugs that slipped past the programmers. There was no way for iPhone programmers to beta-test their products before the App Store launched. The software used to create iPhone programs was released under a nondisclosure agreement, which meant developers couldn't show the public the programs they were creating ahead of time. Developers in countries without iPhones could only test their programs on the iPod touch.

PHOTOGRAPH BY PETER BELANGER

Think about that: 500 programs, all of them at version 1.0, on a device that has never before supported non-Apple software.

The cloak of secrecy also prevented programmers from sharing tricks they had picked up during their work. Some of them figured out workarounds so they could test each other's programs. But the kind of robust prerelease software testing we are used to seeing with Mac software simply didn't happen for the iPhone's third-party programs.

As a result, the first batch of iPhone software entered the world surrounded by some trepidation, delivered by a bunch of programmers who were collectively holding their breath and crossing their fingers. And, as it turns out, plenty of bugs have popped up in those early iPhone programs, to the frustration of everyone concerned.

Apps, Not Albums

Then there's the App Store itself, which Apple has based on its existing iTunes infrastructure. It's a proven system, one on which Apple has sold tens of millions of songs over the years. But aside from a handful of iPod games, the company hasn't used it to sell a lot of software before.

Software gets updated and improved, unlike album tracks. The App Store has a mechanism that enables users to receive updates for the programs they've downloaded. But just one week into the new setup's life, several developers had fixed major bugs in their software, only to find their updates stalled somewhere inside the App Store.

And then there's the reviews mess. iTunes's system of user reviews is based on the idea that people will write short opinions on music albums. Almost immediately, it became apparent that this system is utterly inappropriate for the App Store. Users post questions or misperceptions about products, and developers have no way to respond. Other posts feature "reviews" from people who have never actually used the product.

Brave New Frontier

It's sure a kick to use innovative software on a device that once served just for phone calls, e-mail, music listening, and Web browsing. But like many frontiers, the novel world of iPhone software can be uncomfortable and even a little bit dangerous. (Since installing a lot of add-on software, I've found that my iPhone crashes more frequently.)

I'm sure that Apple will eventually get its act together and fix the process of developing, debugging, and selling iPhone software. In the meantime, you might want to venture into the App Store cautiously and with great care.

What do you think? Did you buy the new iPhone? Have you used any App Store programs? Let me know in the Macworld forums (forums.macworld.com) or via e-mail at jason_snell@macworld.com.

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Bending the Mac Rules

Finding the perfect Mac match and the best Windows programs

Apple Picking

What I found interesting about "The New Rules for Buying a Mac" (June 2008) is the implication that if you are not someone who does computationally intense work, you have no business owning a Mac Pro. Maybe I don't need a Mac Pro, but since I can afford it and wanted it, I bought it. Sure, it cost quite a bit more than an iMac, but it absolutely screams. It also makes me feel good owning such a high-powered work of art. It's kind of like preferring a Lexus over a Hyundai—both will get you from point A to point B. One just does it with more style.

Michael FitzGibbon

The current Mac lineup is missing certain machines. The base level offers only mediocre glossy screens with narrow viewing angles; the white MacBook has a cheap, fragile finish; and Apple still has some catching up to do with regard to the cost of memory and hard drives. The truth is, I can't find my next Mac. My hope is that with Apple's good sales numbers, it will finally expand its computer lines. There are already plenty of iPods—it's time to get back to the core. Until Apple releases products like a midrange minitower, a 12-inch MacBook Pro, and a 10-inch MacBook, I am not buying another Mac.

Frank Dobbelaere

Most people forget to mention that the MacBook Air, with its solid-state drive and lack of an optical drive, is a good computer for rugged environments where vibration would damage most laptops' drives. The Air could be a Mac competitor for such products as Panasonic's Toughbook laptops, which still have CD/DVD drives.

David Coldwell

Your article should have added this rule: When you decide to buy a Mac, you should accept that in two weeks a cheaper or better model will come along at the same price. If you cannot handle that notion, don't buy.

Kevin Hayes

As a matter of fact, two weeks after this article went to press, Apple shipped new iMacs. You can check out the updated version of the story, which includes testing on all the new iMacs, at macworld.com/3635.—Jason Snell

Thankful for Windows

After Parallels and Fusion, there is a third smart way to run Windows on a Mac: combining one virtual machine, such as VMWare, with Apple's Boot Camp and installing Windows natively ("Best of Both Worlds," June 2008). With a virtual machine, you have access to both the Windows and Boot Camp partitions, you can run Windows programs, and you can share documents. Running Windows natively lets you efficiently get Windows updates, user and system security features, and all the Windows game features.

K. Vanegas

I'm pretty sure that Apple's profits are up in part because it offers users the

PHOTOGRAPH BY PETER BELANGER

OVERHEARD ON THE FORUMS

The real problem with the AppleTV and Apple's movie service is that it is simply too expensive. At nearly two to three times the cost of my Netflix service, the convenience simply isn't worth it. I have to go to the mailbox anyway, and it isn't necessarily a bad thing that I have to wait to receive a movie.

ericgorr
macworld.com/3671

amazonmp3 Since the advent of DRM-free music from Amazon, any instant gratification needs are met there. I still hunt down music via used CDs, however, since it allows me to own the original content.

NTropy
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One gigabyte (GB) = one billion bytes. One terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.

option to run Windows on a Mac. I boot into XP to run programs for which there are no Mac equivalents. I wanted to run these programs badly enough that I was willing to pony up several hundred dollars for a legal copy of XP (though I'm sure Microsoft would have survived without my purchase). The best part is, my Mac runs Windows better than most PC-based computers.

Tony Thomas

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Easier Archiving

Christopher Breen had many good tips in "Evade E-mail Exasperation" (*Working Mac*, June 2008). But his proposed solutions for archiving old e-mail messages lack powerful search capabilities. My solution of choice is the $50 MailSteward (mailsteward.com), which lets you choose which messages to archive and provides a simple user interface for search and retrieval. It does automatic scheduled backups, and even lets you select which fields to index.

Rob Lewis

Photo Touch-ups

You mentioned that the Olympus E-3 is an autofocus speedster ("Photo Opportunities," June 2008). You should have briefly clarified to your readers that this has less to do with lighting conditions (and the camera's processing power to interpret them) than it has to do with the camera's lens. The E-3's lens contains a focusing motor that handles the task of moving the optics. Body-based motors are *always* slower. Olympus calls its in-lens motor technology the SuperSonic Wave Drive; Nikon calls its version the Silent Wave Motor.

Paul Threatt

PHOTOGRAPH BY PETER BELANGER

Thank you for doing a review of digital SLRs. I'm sure people will complain, "This is a magazine about Macs—what's a camera review doing here?" I think it's refreshing to read a review of cameras that isn't from a photography magazine. You've brought my two worlds together, if only for one issue.

Trevor Weimer

I think there is an error in your DSLR review. "The Letter of

the Lens" states that the Nikon DX lenses will not work on the Nikon D3. This is not true. The Nikon DX lenses will work on the Nikon D3, but in a cropped version mode. The viewfinder actually indicates how the image will change when you use the D3's DX lens.

Paul Applegate

You are correct. When a DX lens is attached to the Nikon D3, the viewfinder shades off portions of the frame that will be cropped. We regret the error.—Roman Loyola

Apple: Alive and Well

I love the way John Moltz humorously approached the rumors of Apple's supposedly soon-to-arrive death ("The End of the World," *Spotlight*, June 2008). He points out Apple's ability to speedily come out with revolutionary new products, and how Apple will remain strong unless everyone in the company runs out of ideas. I'd like to see more work from Moltz.

Greg Wyatt Jr.

I realize this article is a couple of months old, but unless it's a decade old, I wasn't aware that a crowd has been predicting Apple's imminent death. Even at the nadir of the company's recent stock dive to around $115, I didn't hear or read of anyone, short of the usual Windows shills, predicting doom and gloom for Apple. In fact, all I heard was the opposite.

Samrod Shenassa

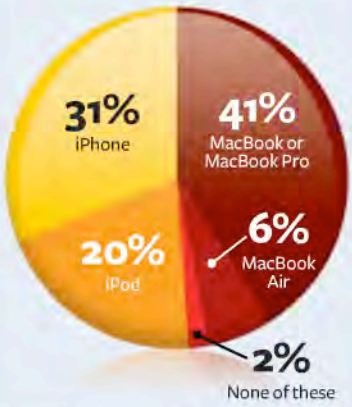
Geeking Out

This geek found just what the doctor ordered in "Control the World" (*Geek Factor*, June 2008). I've been looking for a single-board computer (SBC) solution for tying my laptop to some simple ground support equipment. The electronic engineering trade magazines concentrate on 32-bit solutions for people with $10,000 development systems. This article gave me leads on modest hardware solutions for my problems.

Bob Goeke

READER POLL

If you could take only one of these products with you on vacation, which would it be?



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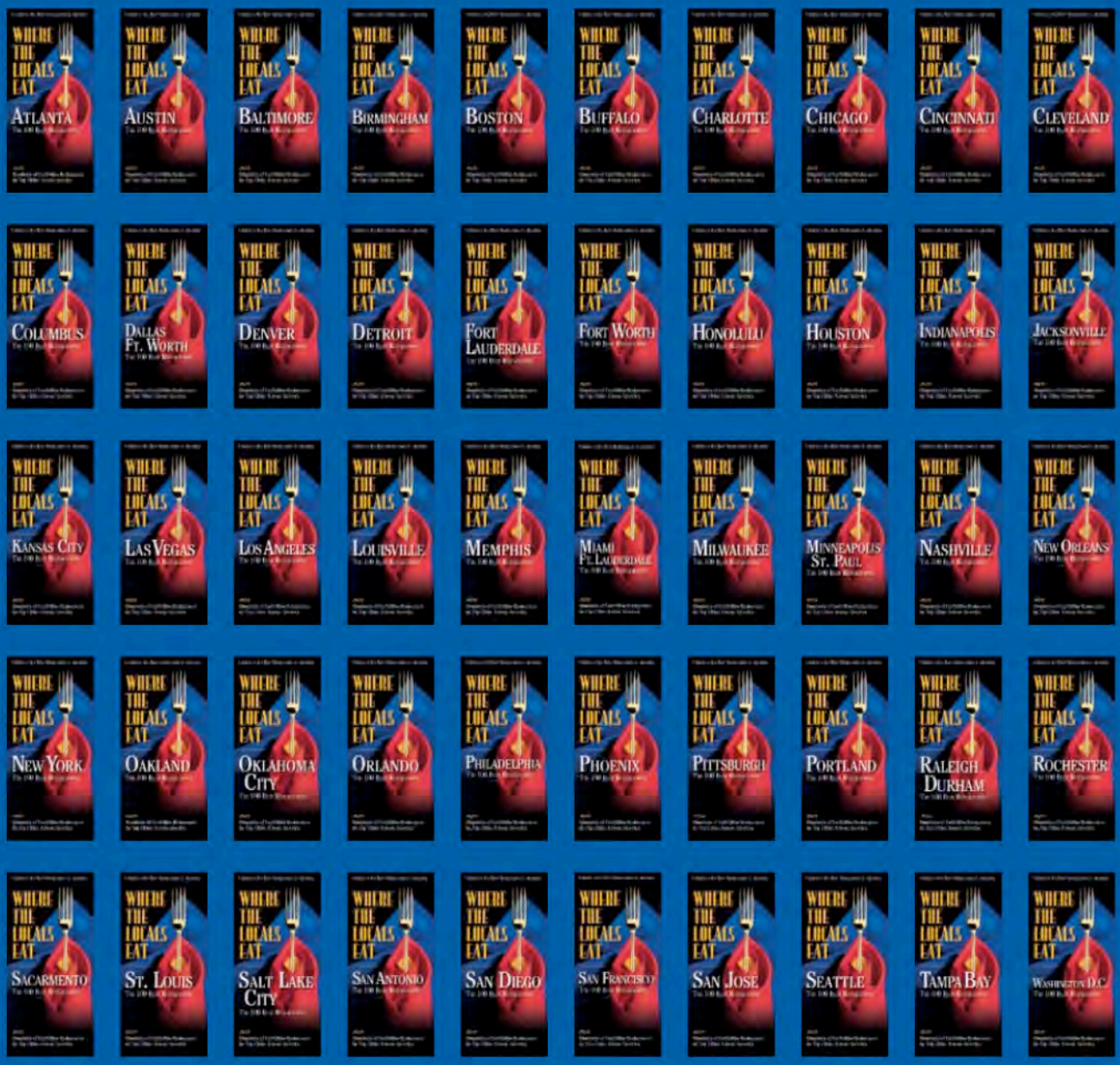

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MacUser

BUSINESS

Macs Making Inroads in the Enterprise Market

Developers join forces to promote Macs in large companies

BY JIM DALRYMPLE

The enterprise market—which is mostly made up of large companies with many employees, departments, and computers—has been dominated by Windows for a long time. Employees who try to integrate Macs in such environments (or in any PC-dominated office, for that matter) often find themselves rebuffed by their IT departments.

Although Apple could do more to help Macs gain acceptance in the enterprise world, many Mac developers and analysts actually think Apple should just continue to concentrate on making products and let other people worry about integrating them into these higher-end environments.

Banding Together

Recently, a number of enterprise-focused Mac companies joined forces to form the Enterprise Desktop Alliance (EDA), a new group whose goal is to facilitate the acceptance of Macs in the Windows-dominated enterprise world.

The founding members of the group include Atempo, Centrify, Group Logic, LANrev, and Parallels. Together, the companies believe they can show organizations how to integrate Macs into Windows-based environments, while reducing the total cost of ownership.

"We all heard from our customers that we should be working together," says Peter Frankl, founder of LANrev. "Once we started talking, we realized that all of our customers were saying the same thing."

While bringing Mac-focused companies together will certainly help the group show organizations that Mac and Windows can coexist, there are still some hurdles to overcome.

"Interest in the Mac at large organizations is growing along with Apple's market share," says Bob O'Donnell, vice president at market research firm IDC. "The challenge has been overcoming objections surrounding managing Macs within these corporate environments."

Frankl says that more companies these days are letting employees choose the computers they want to use. And the Mac

ILLUSTRATION BY ALEX EBEN MEYER; PHOTOGRAPH COURTESY OF APPLE

is an increasingly popular choice, which forces executives to find a way to integrate them into the corporate environment.

But it's not just Macs that have brought this integration issue to the fore in recent months. Adoption of the iPhone has put pressure on IT departments to find a workable solution for the device's integration. And Apple's new iPhone 3G includes many enterprise-targeted features as well. This will be another catalyst for getting Macs into large companies, as executives who purchase iPhones will expect their IT departments to support them.

One way the EDA plans to help is through education. The group will host a series of events, including Webcasts and seminars, and will provide white papers, product information, and other resources on the EDA Web site.

Retraining employees on a new operating system can also be costly for large companies.

"This would slow us all down," says Jetha. "You won't see the type of innovation Apple shows from Microsoft because they have to cater to enterprise. If Apple caters to the enterprise like Microsoft [does], progress is going to slow."

That point is not lost on Tim Deal, senior analyst at market research firm Pike & Fischer. "Apple has not tried to be everything to everyone, and that has certainly been a key factor in its strong position of innovation," says Deal.

While Deal doesn't feel Apple does enough to promote its strengths in the enterprise market, he does think that Apple's focus on certain areas of the market over the years has been a winning strategy.

Apple should concentrate on making products and let others worry about integrating them into the enterprise.

"Efforts that can make life easier for the IT professional and help the Mac become a more appealing and realistic alternative within the enterprise could help turn that interest into a stronger Mac presence," says O'Donnell.

Outside Support

Other Mac developers who cater to business customers concur with the strategy of letting outside companies handle the enterprise aspect while Apple stays focused on the end user.

"I don't think Apple should specifically target the enterprise," says Alykhan Jetha, president and CEO of Marketcircle, a maker of billing and productivity management software. "It's not that I don't want those customers, because I do, but the enterprise market has fundamentally different requirements than you and I [do]."

For example, those in the enterprise market may not be as willing to switch to a new operating system as individual consumers, for fear of incompatibilities with existing systems and software.

"Focusing on and having a good reputation for those niche markets has really worked for [Apple]," says Deal. "Those markets typically don't look anywhere else for [its] products."

Dennis Bilowus, president of AEC Software, the maker of FastTrack Scheduler, thinks that Apple should do more to promote itself in the enterprise market, but recognizes that the company has been doing a much better job in the past year.

Bilowus points out that one of Apple's strongest niche markets, higher education, is also one of its biggest enterprise customers.

Overall, Mac developers seem pleased with Apple's position on the enterprise market. While a bit more promotion would be nice, focusing on growing the business seems to be in everyone's best interest.

"When it comes to Apple, it has a long history of customers evangelizing for it," says Deal. "That puts the company in a unique position in the market. That represents the unique nature of Apple."

Jim Dalrymple is *Macworld*'s editor at large.

STORAGE

MacBook Air Gets Cheaper Solid-State Option

The market for solid-state drives—storage devices that have no moving parts and that stash data in solid-state memory—continues to evolve, as manufacturers figure out ways to store more for less. And that will likely benefit consumers who keep an eye on the ever-changing market.

Case in point: Apple recently cut the price on the version of the MacBook Air that comes equipped with a solid-state drive. Apple offers its ultra-thin notebook in two configurations: the standard $1,799 1.6GHz model with an 80GB hard drive, and a configuration featuring a faster 1.8GHz chip and a 64GB solid-state drive. That drive stores data on silicon rather than on the rotating hard-disk platter you'd find in a conventional drive.

When the MacBook Air debuted in January, Apple offered the version with the solid-state drive for an eye-popping $3,098. But six months later, the company cut that price to $2,598. (MacBook Air customers can also add the 64GB SSD to the 1.6GHz model for an extra $599.)

This price cut came about because manufacturers are now able to produce SSDs for less money—and Apple is passing the savings along to its customers.—**PETER COHEN**

PEOPLE

Fake Steve Jobs Moves to Newsweek

Dan Lyons—known to most of us as the Fake Steve Jobs or FSJ (fakesteve.blogspot.com)—is leaving *Forbes* after ten years to fill the vacancy at *Newsweek* left by Steven Levy, who is moving on to *Wired*.

Forbes assistant managing editor Bruce Upbin called Lyons a "tremendous reporter and columnist," and added, "Saying we wish him well is an understatement."

A few weeks after the news went public, Lyons announced that the blog would cease, but that he'd be starting a new one under his own name. And he assured fans that "Fake Steve is not really going away. He's just taking on a new form."

Here's to a bright future.—**DAVID DAHLQUIST**

BUSINESS

Macs (Kind of) Conquer Business

According to a Yankee Group Research survey of more than 700 senior IT admins and executives, eight in ten businesses said they have Macs in-house. Considering that in early 2006 only 47 percent of IT professionals used Macs in their business, that's a huge increase. And 21 percent of the surveyed firms said they use more than 50 Macs.

According to Laura DiDio, a research fellow at Yankee Group Research, "This isn't Mickey Mouse; it's not just onesies and twosies anymore. Apple's graduated into the big league."

Why such a significant jump? The Intel transition: 28 percent of the surveyed firms said that they run Windows in virtual machines on their Macs, and 22 percent said they use Boot Camp. Oh, and 80 percent of the surveyed firms rated Mac hardware reliability as excellent or very good.—**AARON FREEDMAN**

DAN LYONS PHOTOGRAPH BY MARK COGGINS; MAC PHOTOGRAPH COURTESY OF APPLE

GAMES

Diablo III Ready When It's Ready

The rumors were true: Blizzard Entertainment has announced Diablo III. The game is currently in development for OS X and Windows, although there's no release date or price yet—the company is known for telling the public that its games will be released only when they're done.

Blizzard unveiled Diablo III at a worldwide invitational gaming event held in Europe, and has posted details on its Web site, including a cinematic trailer and game-play video that offers an in-depth look at some of the game's new capabilities and features.

Diablo II was released in 2000. Since then the company has turned its attention to its Warcraft franchise and is also working on StarCraft II.—**PETER COHEN**

PRODUCT WATCH

HARDWARE

Freestyle Solo Keyboard for Mac, from Kinesis (www.kinesis-ergo.com): Keyboard splits in half to help user maintain ergonomically correct posture ($99).

My Book Mirror Edition, from Western Digital (www.wdc.com): USB 2.0–based external storage system with two hard drives can be configured in RAID Level 0 or 1 (1TB, $290; 2TB, $550).

NX-PN7, from JVC (www.jvc.com): Dual-iPod docking station charges iPods, offers music playback, and integrates an AM/FM tuner, clock, and timer ($150).

Stylus NX400, from Epson (www.epson.com): All-in-one printer outputs up to 34 pages per minute and includes a built-in scanner and a 2.5-inch LCD for editing photos ($100).

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BUSINESS

Excel's Solver to Return

One of the many casualties in the transition from Office 2004 to Office 2008 was Solver in Excel, used for data analysis and business modeling. Microsoft dumped it from Excel because it depended on Visual Basic for Applications (VBA), which is no longer part of Office. While most home users don't use Solver, it's a very powerful tool, and many businesses called for its return.

In Microsoft's Office For Mac blog, the company has answered that call: "We have been hearing loud and clear from our customers—particularly in education—that Solver is a critical and necessary tool for coursework. The Excel team is actively working to bring Solver to Excel 2008 as part of a future update."—**DERIK DELONG**

LAPTOPS

Apple Notebook Shipments Up 61 Percent

A new report from market research firm DisplaySearch shows that Apple's worldwide notebook shipments grew 61 percent from the first quarter of 2007 to the first quarter of 2008. Shipments rose from almost 900,000 to more than 1.4 million.

The growth puts Apple in seventh place in overall worldwide notebook market share, with 4.6 percent. The growth *rate* tells a different story, however. Apple is second overall in growth behind Asus, which grew 67 percent. Lenovo is the only other company that was close, coming in with 58 percent growth.

In all, 31.1 million notebooks shipped in the first quarter of 2008. DisplaySearch is forecasting shipments of 135 million units for the year.—**JIM DALRYMPLE**

Tech Trends

45 Million iPhones?

Piper Jaffray analyst Gene Munster recently created a stir when he issued his forecast for iPhone sales in 2009: 45 million units. That's a big jump from the 10 million phones Apple said it would sell by the end of 2008 (Munster predicts 12.9 million for 2008 alone). It would give the iPhone a 17 percent share of the global smartphone market by 2009.

—MARYANN JONES THOMPSON

Predicted Sales (in millions of units)

Source: Gartner and Piper Jaffray

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INTERNET

Internet Access from Your Car

If you've ever been jammed into the backseat of a cramped car on a lengthy road trip, then you've probably also longed for the sweet embrace of Internet access in your vehicle. If Chrysler has its way, you'll soon be able to log onto a Wi-Fi network from the comfort of your own car. The *Los Angeles Times* says the auto manufacturer plans to start offering to build 3G-to-Wi-Fi routers into its 2009 model-year cars, cleverly secreted somewhere in the car. Chrysler optimistically thinks that you ought to be able to pull down data at between 600 and 800 Kbps and upload at 200 Kbps.

Naturally, this will all come at a cost—you'll have to shell out a monthly fee for the Internet access. As well as buy a Chrysler.—**DAN MOREN**

LEGAL

Apple Finally Drops the Hammer on Psystar

It took long enough, but Apple's team of lawyers has at last filed suit againt Mac-clone maker Psystar (not long after the company added an Xserve clone to its roster). The lawsuit charges, among other things, copyright infringement, breach of contract, and trademark infringement and dilution. Apple is seeking treble damages, attorney fees, and an injunction to keep Psystar from selling any more clones—and, oh yeah, Apple is also demanding that Psystar recall all the products it's sold so far. In other words, I think it's time to close up shop.—**JONTHAN SEFF**

By the Numbers

35%
Portion of Fortune 500 companies in the iPhone developer program, as of WWDC 2008

10
Maximum prison sentence (in years) faced by Daniel Dove, former administrator of EliteTorrents.com, for copyright infringement

6.9 million
Number of Web searches for iPhone-related terms in April, according to research firm comScore

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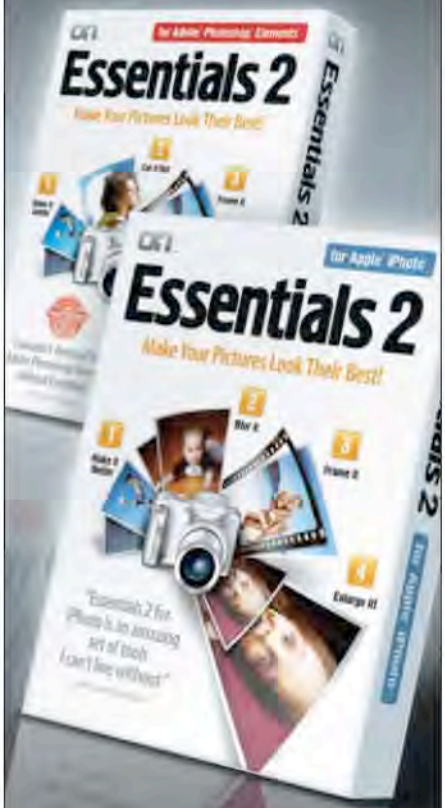

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Everything you need to know about digital music on-the-go

Apple Throws Wrench in iPod Mechanic's Schemes

Nicholas Woodhams, who runs Michigan-based iPod Mechanic, has found himself on the receiving end of a lawsuit claiming that not only did he fail to stop using *iPod* in his business's name in 2006, as he'd agreed to do, but furthermore he engaged in fraud by taking advantage of Apple's warranty service. The suit says that Woodhams got Apple to repair broken out-of-warranty iPods by swapping their back cases with those of units that were still under warranty.

He also supposedly took advantage of a replacement program for iPod shuffles by writing the names of his customers on the appropriate forms, receiving new units, and then denying credit card charges from Apple after he failed to ship the old units back to the company.

Apple says that it suffered losses of $75,000 as a result of Woodhams's actions, and the company is seeking treble damages on the basis that the acts were deliberate.—**DAN MOREN**

Rhapsody Joins the DRM-Free Bandwagon

The march toward DRM (digital rights management) freedom continues apace. Rhapsody, the country's largest subscription-based service, now joins the ranks of Amazon, Napster, and parts of iTunes in offering DRM-free content. The joint venture between Real Networks and MTV has finally launched its MP3-based store, with more than 5 million tracks from all four major labels.

Rhapsody's plan to take on the iTunes Store is multipronged: the service has partnered with Yahoo Music, the iLike Facebook application, and Verizon Wireless. And of course, adopting the MP3 format means that it can finally sell tracks that work with the bajillion iPods already out there. Rhapsody has a Windows downloader that'll add your download tracks to iTunes—Mac users can download songs only as zip files (thanks a lot, guys). Most songs go for $0.99 and albums for $9.99, and songs are encoded at 256 Kbps.—**DAN MOREN**

What Barack Obama may lack in political experience, he makes up for with a solid, eclectic taste in music. According to an Associated Press story, Obama's iPod is packed with a wide array of music spanning folk (Dylan), classical (Yo-Yo Ma), contemporary female singer-songwriter (Sheryl Crow), and hip-hop (Jay-Z). He also embraces his jazzy side, with legends Miles Davis, John Coltrane, and Charlie Parker earning spots on his playlists.

"Actually, one of my favorites during the political season is 'Maggie's Farm,'" Obama said of the Dylan song. "It speaks to me as I listen to some of the political rhetoric."

As for John McCain, last year he confessed to having Abba on his iPod.—**DAVID DAHLQUIST**

PRODUCT WATCH

SOFTWARE

ConceptDraw Office, from Computer Systems Odessa (www.csodessa.com): Business productivity suite helps you manage projects and more ($499).

Plug-in Suite 4, from onOne Software (www.ononesoftware.com): Adobe Photoshop plug-in collection features six add-ons ($500; upgrade, $200).

Slife 2.0, from Slife Labs (www.slifelabs.com): Time-management software tracks interactions with applications, documents, and Web sites to show how users spend their time (free).

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–Walter S. Mossberg, The Wall Street Journal

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OPERATING SYSTEM

OS X 10.5.4 Ready for Download

Barely a month after the OS X 10.5.3 update, Apple released OS X 10.5.4 in order to fix several issues.

The update addresses AirPort reliability issues with 5GHz networks, and fixes problems with iCal concerning iPhone syncing and the reliability of the meeting requests feature, among other things.

Apple has also resolved performance issues that occur when Safari loads secure Web pages, fixed an Exposé problem that may result in only a subset of windows being shown, added additional Raw image support for several cameras, and solved an issue with saving and reopening Adobe Creative Suite 3 files on a remote server.—**JIM DALRYMPLE**

LEGAL

Feds End Stock Backdating Investigation

Hear that sound? It's the collective sigh of relief emanating from Apple headquarters as the U.S. Justice Department finally concludes its criminal investigation into Apple's stock backdating scandal. According to the *Wall Street Journal*, the investigation has finally let up for good, with no charges pressed. A number of civil suits against Apple remain, but the Feds are out of the picture.—**DAVID DAHLQUIST**

Activity Monitor

TidBits' Adam Engst on why eBook piracy isn't a given
macworld.com/3718

The *New York Times* reveals that Intel won't upgrade 80,000 of its computers to Microsoft's Vista
macworld.com/3720

CNET questions the cost of Apple's laptop upgrades
macworld.com/3719

Give your iPhone double the juice.

The first compact battery backup with a full 1200 mAh of power.

By Richard Thalheimer

My iPhone is my favorite product, though I use it so much, it gets low on battery power by dinner. This led me to develop the rechargeable Smart Backup Battery specifically for iPhone and iPod. Just snap it on (no cable), and it begins to charge the iPhone battery. This powerful 1200 mAh has 20% more capacity than its closest competitor. You can charge the iPhone while using it, and you can charge the battery and iPhone together–like getting an extra charger for free!

There's nothing quite like it. Other chargers use disposable AA's, or cheap plastic cases, or gray-market connectors, and may even damage your iPhone. Ours has a tough aluminum case, and is certified for iPhone. Lithium-ion takes hundreds of charges and doesn't develop memory.

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Three LED lights indicate charge status. Works with all iPhone and iPod models except shuffle.

Made for iPod Works with iPhone

Hours of use may vary, depends on many factors, including type of use and connection speed.
iPod is a trademark of Apple Inc., registered in the USA and other countries. iPhone is a trademark of Apple, Inc.

Snaps right in. Without cables. Without hassle. Fits most cases.

Reviewers give it top marks.

"So does the RichardSolo (made by Sharper Image founder Richard Thalheimer) make for an easy-to-use, no-nonsense backup battery? ...YES!!! This thing is great. It's that good."–*CrunchGear*

"Do you often find yourself in the middle of day with your iPhone battery in the red? If so, I might have the perfect product for you...I found out how amazing this product really was."–*iPhone24x7*

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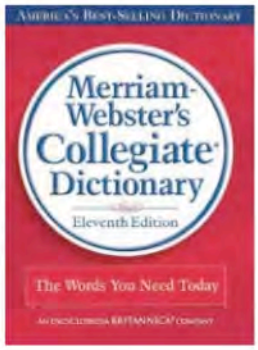

Just because I love Apple, want to marry it, and think everything it does is infallible and every product it makes is perfect and divine and worth ten times its retail price does not make me a fanboy. You know how I know? Merriam-Webster just officially added the word *fanboy* to its dictionary (it has been in OS X's Dictionary program for years), and I definitely don't fit the bill: "a boy who is an enthusiastic devotee (as of comics or movies)." See? Not a fanboy. Legally, I'm a fanman, which isn't even a real word. So there.—**DAN POURHADI**

INTERNET

Apple Taking Heat for MobileMe Logo Design

Leaving aside the silly name for a minute, I just can't abide the logo for MobileMe. It looks as if the Stay Puft Marshmallow Man took a nap in a pile of Apple applications, and then tried to decorate it with blue cake frosting. And I'm not the only one who thinks it looks, if not hideous, at least well below par by Apple's standards.

Blogger Dr. Macenstein immediately pointed out the conspicuous similarities between MobileMe and Microsoft's Windows Me logo. Gawker said the MobileMe design looks like it should be on a package of cheap Japanese soap. And the Manhattan Offender—after posing the question "Is 'MobileMe' the worst logo in the history of the Mac?"—described it as the "poor cousin of the Intel logo."

I don't know if it's the worst ever, but it's gotta be in the top three. Come on, Apple—we know you can do better.—**DAVID DAHLQUIST**

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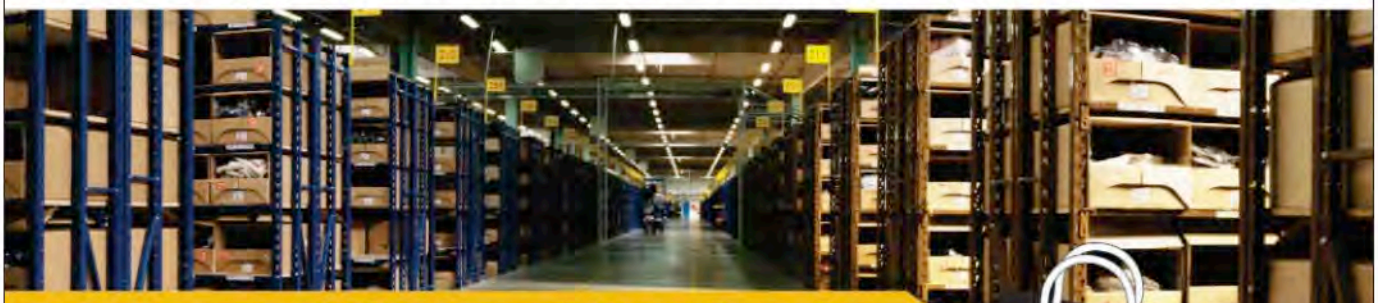

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Hot Stuff

What we're raving about this month

Spore Creature Creator

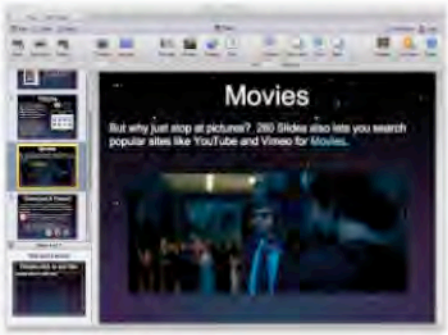
Spore is the latest game from Electronic Arts, creator of SimCity and The Sims. It lets you create and evolve your own creature, from a unicellular life form all the way up to a walking, talking, thinking being. In preparation for the game's September debut, EA has released the $10 Spore Creature Creator, which lets you learn one of the most fun parts of the game—making your own critter. On a supported Intel-based Mac, you can use many different parts and designs to create creatures of all shapes and sizes. You can have your creatures walk around, take pictures of them to send to your friends, and even upload videos of them to YouTube. A free trial version is also available, but it has only 25 percent as many creature parts as the paid version (spore.com).—**PETER COHEN**

Xtand

For all my iPhone does, it deserves to be placed on a pedestal. Apple's iPhone dock doesn't quite cut it, but Just Mobile's $45 Xtand is exactly what I had in mind. Made entirely of aluminum, the Xtand is designed to look like the base of Apple's Cinema Displays or iMacs, thus giving it an even more Apple-like design than the blockish iPhone dock. The original iPhone fits snugly into the Xtand cradle, which you can rotate 360 degrees so that you can easily view your iPhone in portrait or landscape mode (it would be nice if the Xtand could tilt, but that's a minor complaint). To top it off, you can thread an iPhone dock-connector cable through the stand's hole whenever you need to sync with your computer (www.just-mobileonline.com).—**ROMAN LOYOLA**

Eye-Fi Explore

The original version of the Eye-Fi memory card let you transfer pictures from your camera to your computer over Wi-Fi, but Eye-Fi's latest offering really takes you places. The $130 Eye-Fi Explore is a 2GB Secure Digital memory card that adds one year of Wi-Fi hotspot access, unlimited access to Eye-Fi's WebShare service, and the ability to automatically tag your photos with their geographic location (www.eye.fi).—**DAN MOREN**



280 Slides

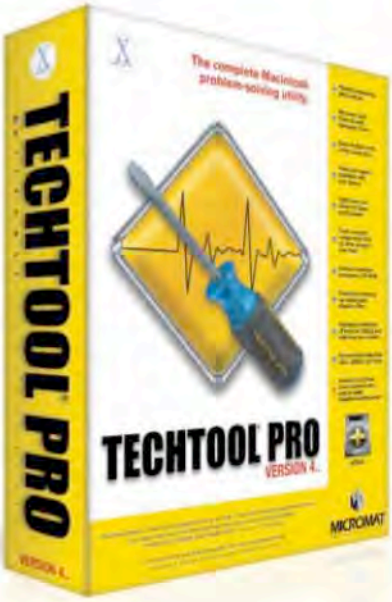
Whether it's due to lack of the right cable or of the right file format, it's all too easy to encounter frustrations when you're giving presentations on the road. But 280 Slides, from 280 North, offers a remedy—take your slide show online. You can author your presentation in this free Web application (still in beta at press time) and then log on to SlideShare (www.slideshare.net) from any Internet-connected computer to show off the results. You can also download your slide show in Microsoft's PowerPoint format. You won't find any fancy animation features here, but 280 Slides is a breeze to use and has a distinctly Keynote-like feel—which comes as no surprise, given that two former Apple employees created it (280slides.com).

—**SCHOLLE SAWYER MCFARLAND**

Snap-In Drive Enclosures

I tend to find myself with more than a few bare hard drives—those without external enclosures. Sharing one enclosure among multiple drives can involve tedious installations and removals—that is, unless you've got one of Addonics Technologies' Snap-In drive cases. When you want to connect a different drive to your Mac, you just unmount the current one, unplug the USB cable, slide the current drive out of the enclosure, slide the other drive in, and then plug in the USB cable again—the process takes only a few seconds, and there are no screws, cables, or mounting brackets to mess with. The $29 Snap-In ExDrive25 holds 2.5-inch SATA drives; the lockable, $77 Zebra Snap-In Mobile Rack holds 3.5-inch drives (www.addonics.com).—**DAN FRAKES**

XTAND PHOTOGRAPH BY PETER BELANGER



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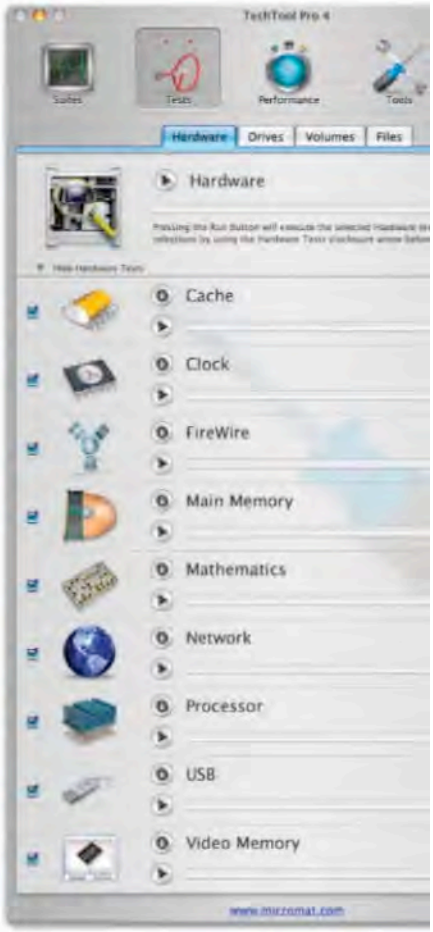

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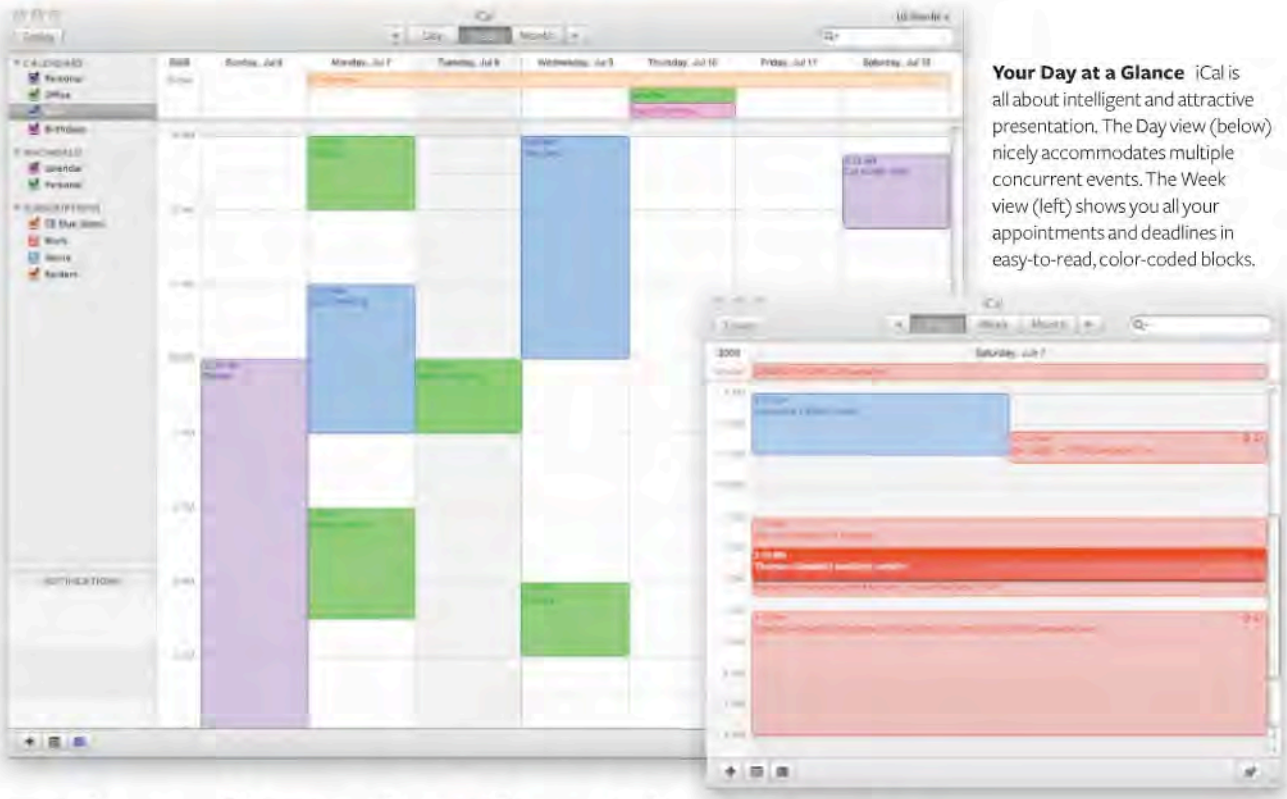
Reviews



Your Day at a Glance iCal is all about intelligent and attractive presentation. The Day view (below) nicely accommodates multiple concurrent events. The Week view (left) shows you all your appointments and deadlines in easy-to-read, color-coded blocks.

The iCal Challenge

8 calendars and organizers compete with Apple's scheduling app

BY WILLIAM PORTER

Woody Allen famously quipped that 80 percent of success is showing up. If your life is ruled by appointments, then you need a good calendaring program like Apple's iCal. On the other hand, the big problem for some people isn't showing up—it's getting things done. If you're one of these folks, your life is ruled by deadlines, and meeting those deadlines involves juggling many projects and priorities.

While the calendar-oriented person can't be in two places at once, the task-oriented person could well be working on three (or 13) projects simultaneously. For the task-oriented person, 80 percent of success is managing competing demands on time, and you may need more power and flexibility than iCal's to-do list provides. And then there is a third group of people whose obligations are fairly balanced between an overwhelming welter of tasks (with or without deadlines) and a never-ending list of appointments. These poor folks need all the help they can get.

The nine programs we review—Objective Decision Contactizer Pro 3.6.1, Marketcircle Daylite 3.7.3, Google Calendar, Apple iCal 3.0.3, Now Software Now Up-to-Date & Contact 5.3.2, Chronos SOHO Organizer 7.0.2, Mozilla Sunbird 0.8, Objective Satisfaction What ToDo 1.3.2, and Yahoo Calendar—tend to fall into one of three categories: calendars, task managers, or hybrids. Six of the nine programs are heavy on calendar features and lighter on task management. Four of those six are Mac desktop applications (iCal, SOHO Organizer, Now Up-to-Date, and Sunbird); the other two are online calendar programs. One of the nine programs (What ToDo) is mainly a project- and task-management tool with few calendar features. Finally, two programs—Daylite and Contactizer Pro—try to do everything: organize calendars, manage projects and tasks, and much more. Be aware that while we reviewed the latest versions of these applications, some of them are updated frequently, and the versions reviewed here might have been updated since we went to press.

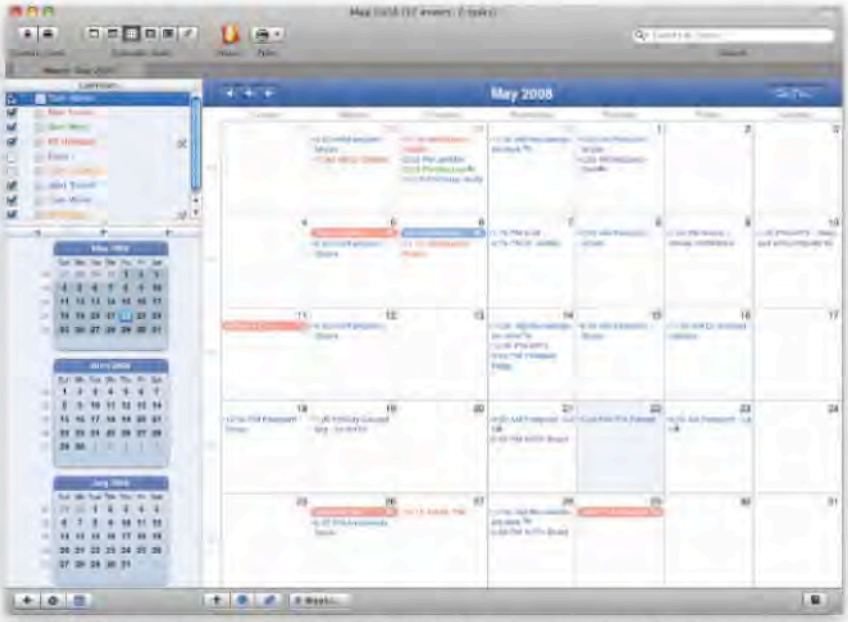
The iCal Standard

Comparing these programs is a bit tricky, because they are all pretty good and each serves a somewhat different set of needs. Let's take Apple's iCal as a starting point,

since it's free from the maker of Mac OS, and it's an excellent program. The question is, do you need anything other than iCal? The answer may indeed be yes. While all of these programs are great for individuals, three of them (Daylite, Now Up-to-Date, and Contactizer Pro) are designed for multiple users and really shine in collaborative environments.

Calendars

Apple's iCal is very easy to use and yet remarkably versatile. You can create as many calendars as you like. You can ask iCal to notify you before an event occurs via e-mail or a pop-up alert. If you want to invite a couple of colleagues to a meeting, iCal can automatically get their e-mail addresses from OS X's Address Book; also, the invitees will automatically have access to any documents you attach to an event. You can easily sync iCal with your iPhone or iPod. You can also share calendars easily on a peer-to-peer network or even by putting your calendar on a calendar server. While you can sync your calendar to your MobileMe account, at press time the service did not support syncing events in calendars you've subscribed to or published. In Leopard, you can even create iCal events and tasks while you are using Mail, and Mail's data detectors will help you pull appointment information from an incoming message. In short, iCal does most of what you'd want a calendar to do.



Powerful but Familiar Interface SOHO Organizer's interface is soothingly familiar, yet it is much more powerful than iCal's. For example, you can create new tabs showing widely separated months, and switch between each view with a click.

Or maybe not. SOHO Organizer's creators felt that they could ask a calendar to do even more. As a calendar, its advantages over iCal may seem minor. SOHO Organizer provides some customized printing options that iCal lacks. The calendar in SOHO Organizer supports a variety of international calendar types; in addition to the standard Gregorian calendar, SOHO Organizer also supports Buddhist, Hebrew, and Islamic calendar formats. And SOHO Organizer's calendar has more display options than iCal has. But you have to step outside the calendar grid to see the most compelling advantages of SOHO Organizer. In an office environment, both iCal and SOHO Organizer calendars can be shared among users, but SOHO Organizer has been designed with more thought to multiuser access.

Contactizer Pro 3.6.1

★★★★

PROS: Single-window; feature-rich.

CONS: No publishing and subscribing; lacks comprehensive manual.

OS X COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $120; Express version, $60

COMPANY: Objective Decision, objective-decision.com

FULL REVIEW: macworld.com/3641

Daylite 3.7.3

★★★★

PROS: Customizable; client-server installation.

CONS: Won't directly import Google Calendar or certain Web services information; difficult learning curve.

OS X COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $189 with Mail Integration Module

COMPANY: Marketcircle, marketcircle.com

FULL REVIEW: macworld.com/3698

Google Calendar

★★★★

PROS: Accessible from anywhere; calendars can be shared with others; easy to use.

CONS: iCal syncing is one way; offline use is limited; no task support.

OS X COMPATIBILITY: N/A (browser based)

PROCESSOR COMPATIBILITY: N/A

PRICE: free

COMPANY: Google, www.google.com

FULL REVIEW: macworld.com/3643

Integrated Organizer Daylite cuts through the clutter with an organizer that combines the power of several programs into one tool.

SOHO Organizer's strength lies principally in the interoperability of its calendar, address book, and SOHO Notes. The SOHO Organizer contacts screen lets you see all events (appointments and tasks) associated with a particular contact, although in iCal you can quickly search the calendar by attendee name to get a similar result. But the real power of SOHO Organizer is the way it works with SOHO Notes. SOHO Organizer provides two ways to write lengthy, free-form memos tied to specific days: the daily journal and daily notes. It seems like one or the other of these could be jettisoned, but Chronos seems to expect that you'll record things like your expenses in the daily notes, and use the journal for more expansive entries. If you're a note-writing kind of person, then the SOHO Organizer suite might be just your thing.

If you're looking for a calendar that's both multiuser and cross-platform, check out Now Software's Now Up-to-Date & Contact, two programs that come as a package. Now Up-to-Date & Contact is basically a souped-up combination of Apple's Address Book and iCal that you can easily share on a network. Unfortunately, Now Up-to-Date & Contact is showing its age. Now Software has been working on a replacement called Nighthawk, which is still in beta at this writing.

Another homely but capable calendar comes from the open-source folks at Mozilla. Sunbird is pretty basic, and on the Mac, most folks will probably be happier with iCal or another choice. Sunbird can't connect with other Mac programs and services such as Address Book or MobileMe. Sunbird's notifications are limited to on-screen pop-ups, and you can only set one. But Sunbird has one nice trick. It supports add-ons, and if you install the free Provider For Google Calendar add-on, you'll be able to get to your Google calendar from Sunbird, and vice versa; you can then manage your calendars equally well from any location. Also, like iCal, Sunbird is free.

Web-Based Services

If you don't want—or can't afford—to be tied to a single operating system or computer, then you can access similar calendar and organizer functions via your browser with Google and Yahoo calendars. These are most similar to the calendars in iCal, SOHO Organizer, and Sunbird. Both of these online calendars allow you to create multiple calendars, invite guests, and receive notifications.

For people who work on multiple machines, the ability to access your e-mail and calendar from any Internet-connected device makes the online services irresistible. Yahoo's calendar includes a basic to-do list and note-taking feature not found in Google's calendar. Nonetheless, I prefer Google Calendar because I use Google Gmail for

iCal 3.0.3

4½

PROS: Easy to use; powerful; integrates with Address Book and Mail; free.

CONS: To-do feature is basic: you can't assign to-dos to projects or track the progress of tasks.

OS X COMPATIBILITY: 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: free

COMPANY: Apple, www.apple.com

FULL REVIEW: macworld.com/3701

Now Up-to-Date & Contact 5.3.2

4½

PROS: Cross-platform; multiuser capable.

CONS: Dated interface; some functionality lost for Leopard users.

OS X COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $130

COMPANY: Now Software, nowsoftware.com

FULL REVIEW: macworld.com/3697

SOHO Organizer 7.0.2

4

PROS: Can sync between computers and mobile devices; note-taking features; innovative new interface.

CONS: Incomplete documentation.

OS X COMPATIBILITY: 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $100; multiuser licenses available for up to 20 users

COMPANY: Chronos, chronosnet.com

FULL REVIEW: macworld.com/3702

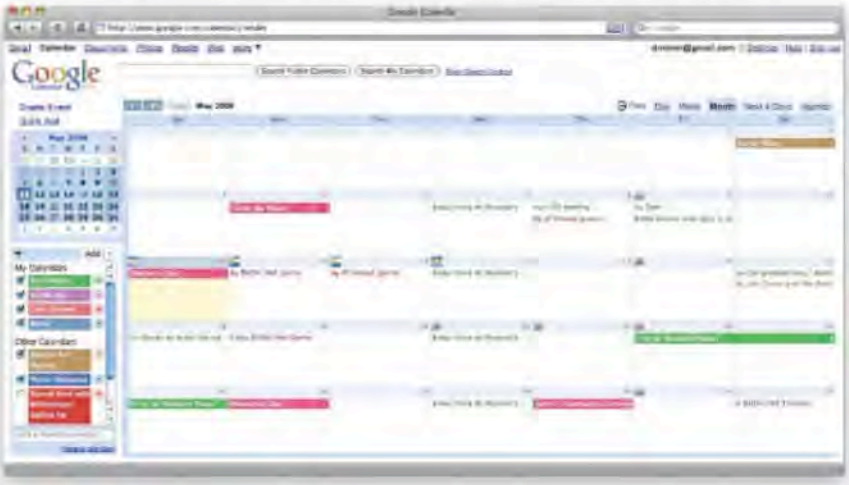
my e-mail. Gmail can often recognize that an e-mail message is suggesting an appointment and will offer a quick way to create an event in your calendar. iCal can do something similar, but in iCal you have to hold your mouse over that text. Gmail's feature is a bit smarter. I sent myself a test message, inviting myself to a meeting tomorrow, perhaps at 12:30, but suggesting next Monday as an alternative, at 9:30 at the Starbucks in Casa Linda Plaza. Mail's data detectors recognized *meeting tomorrow* if I held the cursor over that pair of words, but didn't pick up the time later in the sentence. Gmail, on the other hand, without prompting, suggested creating an event. The event I created with a single click missed *meeting tomorrow* and went instead for next Monday, but did effortlessly pick up the time and the location. (Yahoo Mail has no similar feature.) Google Calendar also can send an SMS (text) message to my cell phone to notify me of upcoming events.

Getting Things Done

With the exception of Google's calendar, all of the programs mentioned so far have a limited to-do–list or task-list feature. You can enter a task, assign it to a calendar, give it a priority level, and check it off when it's done, but that's about it. If you have more-complicated obligations to manage, you need a more flexible tool.

What ToDo is a nifty project and task organizer that's designed along the lines of best-selling author David Allen's Getting Things Done (GTD) books. What ToDo tracks tasks, projects, and contexts—broad classifications under which you can group tasks, such as e-mails to send or phone calls to make.

What ToDo also allows you to group tasks (*items*) within projects, organize them, give them priorities and due dates, and add notes. What ToDo isn't specifically a calendar application, although it shows a mini-calendar in its Detail drawer that you can use to assign deadline dates. It isn't iCal-aware, and a task with a deadline won't automatically appear in your iCal calendar. For individual users, the program's simplicity may well be a plus. And aside from the lack of integration with iCal, it has a very nice Mac OS X user interface. One particular weakness of What ToDo is printing—What ToDo has no special report layouts. Individual users may find that What ToDo works very well as a complement to iCal.



Color-Coded Calendars Google Calendar lets you manage multiple color-coded calendars directly from your browser.

Organize Everything

If you need more power in both the calendar and task-management areas than you can get from, say, iCal and What ToDo, don't despair. A couple of tools can help you get comprehensively organized. But be warned: you might need help with the tools themselves.

The programs in the do-it-all category, Objective Decision's Contactizer Pro and Marketcircle's Daylite, are Mac-only. Contactizer Pro's interface has a

Sunbird 0.8

PROS: Runs on all platforms; supports Google Calendar.

CONS: Modest to-do feature; no support for iSync and Address Book; non-Mac interface.

OS X COMPATIBILITY: 10.3 (Panther), 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: free

COMPANY: Mozilla, www.mozilla.org

FULL REVIEW: macworld.com/3703

What ToDo 1.3.2

PROS: Good task-management tools; tasks can be organized by context and project.

CONS: No alarms; no search function.

OS X COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $29

COMPANY: Objective Satisfaction, www.objectivesatisfaction.com

FULL REVIEW: macworld.com/3700

Yahoo Calendar

PROS: Accessible from anywhere; includes to-do and notes features; IM reminders.

CONS: Ad-laden interface; no direct syncing with iCal; labor-intensive input.

OS X COMPATIBILITY: N/A

PROCESSOR COMPATIBILITY: N/A

PRICE: free

COMPANY: Yahoo, www.yahoo.com

FULL REVIEW: macworld.com/3699

Cross-Platform Calendars Now Up-to-Date & Contact offers excellent cross-platform, multiuser calendaring and contact management.

brushed-metal effect with a sleek, modernistic feel; by comparison, the large, colorful icons in Daylite seem old-fashioned. Looks aside, both programs are loaded with features. Both manage calendars; track e-mail, projects, and associated tasks; sync data with a variety of programs like iCal, Apple Mail, and more; cooperate with programs like iChat and Skype; print reports in a variety of formats; and much more. Contactizer Pro's design seems more conventional: it tracks contacts (people), projects, tasks, and communications, and the links between these entities seem natural.

Contactizer Pro is the easier of the two to learn without consulting the manual—which is lucky for users, since there is no manual. Contactizer Pro takes a peer-to-peer approach to sharing data between users: there's no server, something that Objective Decision touts as an advantage. Technically, it may be an advantage for a three-person shop. But for larger workgroups, Daylite's client-server approach is probably more efficient.

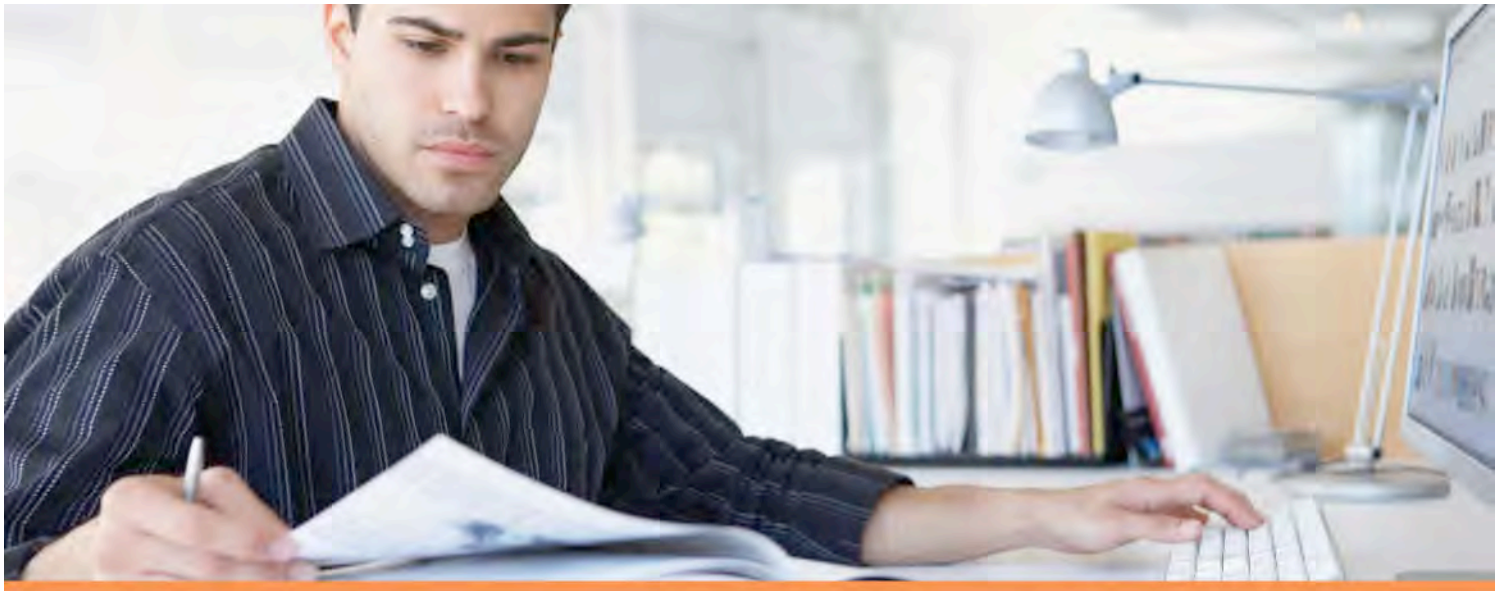
Daylite's approach to linking data is more free-form and takes some getting used to, and it definitely has some quirks. If you create a new task while you're looking at the Notes screen, when you then click on OK and save your task, you won't see it automatically. You have to switch to the Tasks view and select the My Tasks item in the Tasks index pane. This may be disconcerting for novices.

Daylite's calendaring module seems weaker than Contactizer Pro's; you can't, for example, duplicate an appointment in Daylite by option-dragging it to another day, the way you can in Contactizer Pro, iCal, or Now Up-to-Date & Contact. In other respects, Daylite has an even richer feature set than Contactizer Pro, and it is amazingly configurable.

Daylite comes with excellent documentation, as well as instructive sample databases that show how the program can be set up to suit the needs of different kinds of businesses—a law office, for example. One thing I especially liked about Daylite, or would if I were a boss trying to run a tight ship, is that it lets you define cus-

Calendars and Organizers Compared

Program	RATING	PRICE (SINGLE LICENSE)	PLATFORM	SHARING	ALL-IN-ONE PROGRAM	NOTABLE FEATURES
Contactizer Pro 3.6.1 Objective Decision	♦♦♦♦	$120; Express version, $60	OS X	peer-to-peer	yes	Powerful workgroup tools in easy-to-use Mac interface
Daylite 3.7.3 Marketcircle	♦♦♦♦	$149; including Daylite Mail Integration Module, $189	OS X	OpenBase client-server	yes	Powerful workgroup tools, highly customizable, supports pipelines for controlling workflow
Google Calendar Google	♦♦♦♦	free	Web	via Web	yes	Free online service, good calendar, sharable, notifications via SMS
iCal 3.0.3 Apple OUR PICK	♦♦♦♦½	free	OS X	iSync, MobileMe, CalDAV	yes	Calendar with notifications, works with Mail and Address Book
Now Up-to-Date & Contact 5.3.2 Now Software	♦♦♦½	$130	OS X, Windows	client-server	no	Cross-platform sharing
SOHO Organizer 7.0.2 Chronos	♦♦♦♦	$100	OS X	OpenBase client-server, CalDAV	no	Integrated contacts and calendars, powerful note-taking features
Sunbird 0.8 Mozilla	♦♦♦	free	OS X, Windows, Linux	CalDAV	yes	Identical on Mac OS X, Windows, and Linux
What ToDo 1.3.2 Objective Satisfaction	♦♦♦½	$29	OS X	MobileMe	yes	Task manager modeled on Getting Things Done paradigm; supports contexts, projects, due dates
Yahoo Calendar Yahoo	♦♦♦	free	Web	via Web	yes	Free online service, good calendar, notifications



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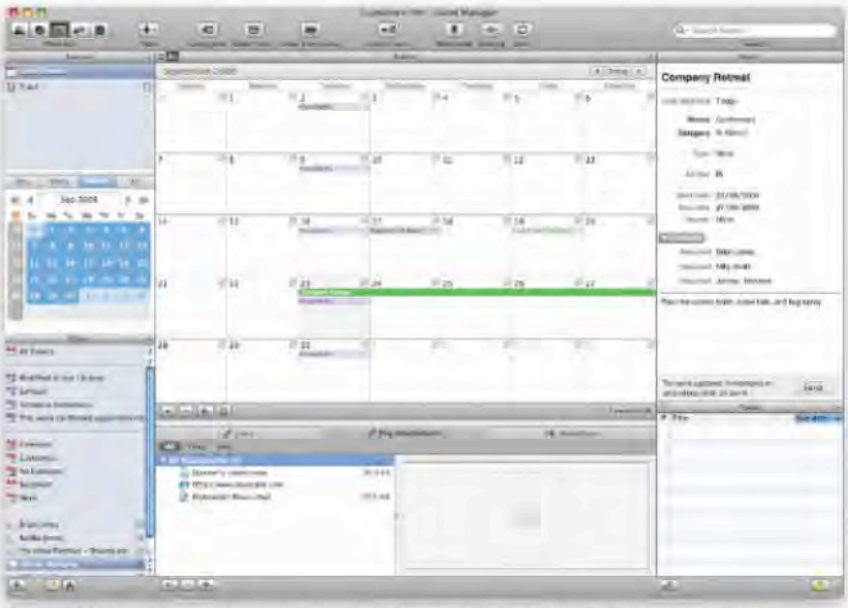

Contact Oriented Using a contact as a filter, Contactizer Pro lets you see only those events associated with that particular contact.

tomized pipelines. A *pipeline* is something like a series of steps that are normally followed as a project progresses from start to finish. For example, a wedding photographer might first need to meet with the bride, then send the contract, and so on. Daylite also tracks opportunities as a special entity.

Both Daylite and Contactizer Pro are really multiuser business applications. Getting the most out of them is going to take some effort. But if you need the features and are willing to commit to the learning curve, either program would be suitable for a busy independent consultant or freelancer.

Macworld's Buying Advice

Try iCal first. It's free, and you already have it on your computer. Though iCal's weak spot is task management, it's otherwise a powerful tool and a very good calendar program, especially for individuals. It works extremely well with the rest of Apple's personal-management applications, including Mail and Address Book. And with its support for the CalDAV calendar-networking specification, iCal is poised to become a player in office networks as well.

I can't recommend Sunbird over iCal, but if you use Mozilla's Thunderbird as your e-mail client, check out Lightning, an add-on that gives you Sunbird's features right inside Thunderbird. Now Up-to-Date & Contact doesn't do much more for individual users than the offerings from Apple and Mozilla, and Now's product is slated for replacement; but Now Up-to-Date & Contact does support sharing in a mixed-platform environment. Simply as a calendar, SOHO Organizer isn't dramatically better than iCal, but it is a terrific program if you're an irrepressible notetaker.

If you live on the Web, the calendar services from Yahoo and Google let you get to your info from any computer with an Internet connection. Yahoo's calendar has a decent to-do list feature, while Gmail and Google Calendar are as good a team as Mail and iCal. And if you need something with real task-management power, What ToDo is my recommendation for the individual user. If you seek a serious, committed relationship with some powerful but demanding software, try both Contactizer Pro and Daylite for a while before deciding which one to go steady with.

William Porter is an independent database applications developer, writer, and events photographer based in Dallas.

Make My Day

The most conspicuous new feature in Entourage 2008 (★★★★; macworld.com/3346) is My Day, a user-interface device designed to let you view your current to-dos and appointments without having to keep Entourage open. My Day floats on top of other application windows so that you can get to it easily. In addition to showing pending appointments and to-dos, My Day lets you add a quick to-do.

If you are used to running many applications at once and aren't intimidated by Entourage, or if you don't have to worry about meeting your next appointment, you probably won't bother with My Day. The My Day floating window is smaller than an application window, but unless you have a very large display, My Day is still large enough to get in the way. If you try to make the My Day window smaller, it ceases to show much information. You can hide it or park it in the Dock or in the menu bar, and bring it to the foreground when you want to use it. But you can do the same thing with Entourage. And My Day's editing capability is so limited that you'll have to open Entourage to use it much of the time anyway. You can't, for example, create a new appointment or event in My Day; it only lets you create undated tasks, and even with tasks, all you can enter is a short to-do note. You have to edit notes, reminders, and priorities in Entourage.

My Day isn't so much about editing as it is about glancing at your upcoming appointments without distractions. Apple provides a Dashboard widget that lets you take a quick look at your iCal appointments. The iCal widget is easy to call up (just press F12), it shows you your next appointments, and it lets you access iCal. Why no My Day widget? The Mac team at Microsoft wanted My Day to be simple and focused, so you can see where you are in your day in an instant.

Turn ambitions into actions

- Schedule dentist appointment
- Download LLC application
- Research travel insurance
- [x] See the Grand Canal in Venice
- Book flights
- Order Italian phrase book
- Interview housesitter
- Call Kristin about web project
- Call for lawn care quote
- Buy plug adaptor
- Pick up dry cleaning

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macworld.com/reviews

What we're reviewing online this month

SOFTWARE

Fable: The Lost Chapters △

RATING: 3½ **PRICE:** $50 **COMPANY:** Feral

URL: www.feralinteractive.com

In this role-playing game, you're a reluctant student at an academy where you learn the art and trade of becoming a hero. Your decisions have a cumulative effect on your character's abilities. The game has dozens of hours' worth of quests and missions to go on, though the graphics style is quite dated and you can't play the game on a Mac that uses the integrated Intel graphics chip set. Fable is a fun romp, though it is showing its age (macworld.com/3709).

Norton AntiVirus 11 △

RATING: 4½ **PRICE:** $50 **COMPANY:** Symantec

URL: www.symantec.com

Norton AntiVirus 11 features a new, more straightforward interface, and a new Vulnerability Protection feature that scans files and images as you download them to ensure they aren't packing viruses or malware. Previous versions of Norton were notorious resource hogs, and version 11 addresses that flaw. Norton will automatically repair any viruses that it finds, and alert you that it has done so. If Norton can't repair the virus, it whisks the virus into Quarantine, a special folder on your hard drive where the virus can't harm your data (macworld.com/3727).

RapidWeaver 4.0 △

RATING: 4½ **PRICE:** $59 **COMPANY:** Realmac Software **URL:** www.realmacsoftware.com

If you find iWeb limiting, Dreamweaver intimidating, and hand coding impossible, give RapidWeaver a try. RapidWeaver is an ideal tool for creating full-featured and professional-looking Web sites. The program's interface is clean, colorful, and intuitive. Creating an HTML photo gallery or a Flash slide show couldn't be easier, and hundreds of third-party themes are available, most either free or under $20, so you don't have to worry about another site looking like yours. RapidWeaver is also a capable blogging tool, but if you want to let your readers post comments, you have to register with Haloscan, a third-party commenting service. All in all, RapidWeaver strikes just the right balance between customizability and ease of use (macworld.com/3726).

VirusBarrier X5

RATING: 4½ **PRICE:** $70 **COMPANY:** Intego

URL: www.intego.com

VirusBarrier X5 (version 10.5.2) bills itself as simple, fast, and nonintrusive, and it

certainly lives up to that billing, with the notable exception of the program's nonstandard interface. You can see at a glance how much of your Mac's processing power it's using to do its job, what mode it's in, the number of scheduled scans you have programmed, and more. VirusBarrier found all of the viruses in our testing, including some Windows-only viruses. VirusBarrier logged everything and dealt with our test viruses quickly and appropriately. If you're in the market for a fast antivirus program, VirusBarrier X5 is the gold standard (macworld.com/3728).

HARDWARE

Crystal △

RATING: 4 **PRICE:** $300 **COMPANY:** Myvu

URL: www.myvu.com

Myvu's Crystal headset lets you privately watch video stored on iPods, other

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Tune into TV on your Mac

Be ready for the digital transition in February 2009, with EyeTV.

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Macworld 4½ EyeTV Hybrid

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Elgato products are available at these and many other authorized Apple dealers:

Apple Store MacMall OWC owcomputing.com newegg.com elgato.com

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portable media players, or other video devices. Inside the headset is a solid optical display that sports crystal-clear, bright, well-defined images at 640-by-480-pixel resolution, though you'll sometimes get glare from ambient light. Myvu provides several tips for the earpieces, to fit a variety of ear sizes (macworld.com/3712).

Little Big Disk Quadra

RATING: ●●●● **PRICE:** $430 **COMPANY:** LaCie
URL: www.lacie.com

This portable, bus-powered hard drive features two drive mechanisms striped in a RAID 0 configuration. The drive has ports for FireWire 800, USB 2.0, and eSATA; LaCie also includes a cable for FireWire 800 to FireWire 400. If you use a FireWire connection, the drive can draw the power from that bus, and you don't need to use the included power adapter. The Little Big Disk Quadra costs considerably more than a similar-capacity full-size desktop drive, but its RAID configuration keeps it competitive performance-wise with desktop drives (macworld.com/3711).

Netflix Player △

RATING: ●●●● **PRICE:** $100 **COMPANY:** Roku
URL: www.netflix.com

This device works with Netflix's Instant Watching service, which allows Netflix members to watch movies and TV shows streamed over the Internet on a television. You can access Netflix's library of more than 10,000 titles online, but there's no way to browse it through the Netflix Player—you have to go to your Mac to choose an Instant Watching video. The Netflix Player sometimes experiences network confusion that requires a reboot. If all you watch are new-release blockbusters, this device isn't for you. But if you enjoy exploring the outskirts of the Netflix catalog, you'll like the convenience and the price (macworld.com/3713).

ScanSnap S300M △

RATING: ●●●● **PRICE:** $295 **COMPANY:** Fujitsu
URL: www.fujitsu.com

For mobile professionals looking for a way to manage paper documents digitally, the Fujitsu ScanSnap S300M is a good choice if scanning to PDF will suffice. The S300M measures 11 by 4 by 3 inches when the paper feeder is folded, and weighs 3.1 pounds, including the power adapter. The S300M took only 8 seconds to scan a single-sided one-page text document, 59 seconds to scan a ten-page single-sided text document, and 14 seconds to scan a two-page color document containing both photos and text. If you need to import text into a modifiable format, be prepared to dish out some extra money for OCR software (macworld.com/3646).

Sierra Wireless Compass 597

RATING: ●●●½ **PRICE:** online, $50; retail, $100 **COMPANY:** Sprint **URL:** www.sprint.com

This device squeezes high-speed, ubiquitous Internet data access and GPS service into a tiny USB cell modem. The Compass 597 uses the fastest version of Sprint's EVDO cellular data network, known as Rev. A; Sprint cites rates of 600 to 1,400 Kbps downstream and 350 to 500 Kbps upstream. We saw downloads of over 2 Mbps in one test, and routinely measured upload and download rates well above the bottom end of the range described by Sprint. With the Sierra Wireless Compass 597, Sprint has created the ultimate mobile broadband modem (macworld.com/3714).

Sports Armband for the Nano

RATING: ●●●● **PRICE:** $30 **COMPANY:** Incase
URL: www.goincase.com

The light weight of the third-generation iPod nano makes it an ideal workout companion, and with the Incase Sports Armband, you don't have to worry about holding onto your nano while you're out on your daily run. This comfortable neoprene armband features a Velcro strap that secures to your arm, as well as a flexible plastic window through which you can access the iPod's controls. The biggest downside is that you can't use the Nike + iPod Sports Kit with this case. But if not being able to track your workout progress with Nike's kit isn't a deal-breaker for you, the Sports Armband may very well serve your exercise needs (macworld.com/3710).

Sony HDR-SR11 Handycam △

RATING: ●●●● **PRICE:** $1,200 **COMPANY:** Sony
URL: www.sony.com

Easy to use, craftily designed, and packed with features, the HDR-SR11 HD camcorder has a 60GB hard drive and supports Sony's Memory Stick Duo cards. The HDR-SR11 uses the AVCHD format to record vivid, high-quality 1,920-by-1,080 resolution video. Most important, the HDR-SR11 works exactly as it should: you simply connect the camcorder to your Mac via USB, and iMovie '08 and Final Cut Pro will recognize the camcorder so you can choose the clips you wish to import. After that, all you have to do is wait for the files to transfer over, and you can start editing (macworld.com/3731).

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Top Products

Your guide to the best hardware we've tested. See more at macworld.com/reviews.

PRINTERS

LASER PRINTER

C6100dn

RATING: ★★★★½
PRICE: $799
COMPANY: Oki Data
URL: www.okidata.com

The C6100dn, from Oki Data, produces great-looking prints and includes built-in duplexing. It also offers easy network connectivity and quick printing speeds (macworld.com/1670).

INK-JET PHOTO PRINTER

Stylus Photo 1400

RATING: ★★★★
PRICE: $256
COMPANY: Epson
URL: www.epson.com

Epson's Stylus Photo 1400 prints photos that are rich in both color and detail. Capable of outputting images as large as 13 by 19 inches, this printer is surprisingly well priced, without compromising on quality (macworld.com/2924).

COMPACT PHOTO PRINTER

PictureMate Zoom PM 290

RATING: ★★★★½ **PRICE:** $211 **COMPANY:** Epson
URL: www.epson.com

Affordable, problem-free, and enjoyable to use, the PictureMate Zoom is the speediest and best overall portable photo printer on the market (macworld.com/3102).

MULTIFUNCTION INK-JET

Pixma MX850

RATING: ★★★★½ **PRICE:** $200 **COMPANY:** Canon
URL: www.canon.com

The MX850 prints crisp, legible text that's comparable to laser quality. Add to that speedy performance, solid print results, and extra perks, and you have a superb multifunction printer (macworld.com/3593).

MACS

PRODUCT	PROCESSOR	RATING	PRICE[A]	DISPLAY	SPEEDMARK 5 SCORE[B]	FIND CODE[C]
DESKTOP						
iMac	Intel Core 2 Duo/2.4GHz	★★★★	$1,229	20 inches	230	3597
	Intel Core 2 Duo/2.66GHz	★★★★	$1,419	20 inches	254	3598
	Intel Core 2 Duo/2.8GHz	★★★★½	$1,704	24 inches	268	3599
Mac mini	Intel Core 2 Duo/1.83GHz	★★★★	$575	not included	159	3030
	Intel Core 2 Duo/2GHz	★★★★	$773	not included	172	3031
Mac Pro	Intel Xeon/ two quad-core 2.8GHz	★★★★½	$2,564	not included	314	3363
PORTABLE						
MacBook	Intel Core 2 Duo/2.1GHz	★★★★	$1,024	13 inches	180	3464
	Intel Core 2 Duo/2.4GHz	★★★★½	$1,230	13 inches	193	3465
	Intel Core 2 Duo/ 2.4GHz (black)	★★★★½	$1,419	13 inches	196	3466
MacBook Air	Intel Core 2 Duo/1.6GHz	★★★½	$1,609	13 inches	124	3364
MacBook Pro	Intel Core 2 Duo/2.4GHz	★★★★½	$1,830	15 inches	204	3467
	Intel Core 2 Duo/2.5GHz	★★★★½	$2,225	15 inches	222	3468
	Intel Core 2 Duo/2.5GHz	★★★★½	$2,349	17 inches	219	3469

[A] From a PriceGrabber survey of retailers as of July 8, 2008. [B] Speedmark 5 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.5 (Leopard). For information on Speedmark testing, go to www.macworld.com/speedmark. [C] Typing in find codes after *macworld.com/* directs you to a product's review or overview. For example, macworld.com/3364 contains an overview of the 1.6GHz MacBook Air.

MULTIFUNCTION LASER

MFC-9840CDW

RATING: ★★★★
PRICE: $634
COMPANY: Brother
URL: www.brother-usa.com

The MFC-9840CDW not only is a great all-in-one color laser printer, scanner, copier, and fax machine, but also has bonus features, such as a duplexer and wireless connectivity, that make it an outstanding value (macworld.com/3566).

FLATBED SCANNER

Perfection V700 Photo

RATING: ★★★★
PRICE: $500
COMPANY: Epson
URL: www.epson.com

The Epson Perfection V700 Photo is an excellent and very speedy midrange scanner with two lenses for people who need to scan reflective media and transparencies, especially at high resolutions (macworld.com/1519).

Top Products are those we've recently reviewed in a comparison of like products. As new products become available, we'll update this list. For longer reviews of these products and for other product recommendations, go to macworld.com/reviews. All prices are the best current prices taken from a PriceGrabber survey of retailers as of July 8, 2008.

DIGITAL CAMERAS

DIGITAL SLR

D40

RATING: ★★★★ **PRICE:** $540
COMPANY: Nikon
URL: www.nikonusa.com

The Nikon D40 is a great value. This 6.1-megapixel camera comes with every feature you'd desire in a DSLR, such as adjustable ISO, Raw mode, and a variety of image-processing features (macworld.com/2498).

COMPACT DIGITAL CAMERA

NV11

RATING: ★★★★½
PRICE: $190
COMPANY: Samsung
URL: www.samsung.com

An excellent point-and-shoot digital camera, the 10.1-megapixel Samsung NV11 produces detailed and well-exposed images. Its versatile feature set accommodates beginners and advanced shutterbugs alike (macworld.com/2984).

MINIDV CAMCORDER

Vixia HV30

RATING: ★★★★
PRICE: $715
COMPANY: Canon
URL: www.canon.com

NEW Canon's Vixia HV30 is a fine choice for die-hard MiniDV users, offering superb video quality and a bunch of nifty features. MiniDV is gradually becoming a technology of the past, but the HV30 proves that age can also offer sophistication (macworld.com/3708).

LCD MONITORS

LARGE DISPLAY

LP2465

RATING: ★★★★
PRICE: $540 **COMPANY:** Hewlett-Packard
URL: www.hp.com

The HP LP2465 is an extremely adjustable 24-inch desktop LCD panel with a 16:10 wide-screen aspect ratio that immediately calls to mind the cinema. This affordable display's screen features a quick, 6ms gray-to-gray pixel response time, which makes it an excellent choice for viewing motion-heavy graphics in games and movies. (macworld.com/2508).

MEDIUM DISPLAY

MultiSync 2190UXi

RATING: ★★★★½ **PRICE:** $997 **COMPANY:** NEC
URL: www.necdisplay.com

The NEC MultiSync 2190UXi monitor is designed—and priced—for professional users. This 21-inch display doesn't come cheap, but it offers vivid, accurate colors; a wide viewing angle; and a convenient height-adjustable stand (macworld.com/1445).

FIREWIRE HARD DRIVES

DESKTOP DRIVE

My Book Studio Edition

RATING: ★★★★½ **PRICE:** $228
COMPANY: Western Digital
URL: www.westerndigital.com

The My Book Studio Edition's affordability, versatile connection options, compact design, and good performance add up to a superb 1TB drive (macworld.com/3295).

PORTABLE DRIVE

Rocbit 2B

RATING: ★★★★★
PRICE: $150
COMPANY: Rocsecure **URL:** www.rocsecure.com

The portable Rocbit 2B is priced a bit higher than similar portable drives that lack encryption, but it's well worth its cost if security is a concern. In our tests, the Rocbit 2B was 6 to 31 percent faster than three comparable drives from other vendors (macworld.com/1443).

iPODS

PRODUCT	CAPACITY	RATING	PRICE[A]	DISPLAY	BATTERY LIFE	MEDIA SUPPORTED	FIND CODE[B]
iPod classic	80GB	★★★★	$230	2.5-inch color	30 hours of music playback; 5 hours of video playback	music, photos, album art, video, games	3090
	160GB	★★★★	$319	2.5-inch color	40 hours of music playback; 7 hours of video playback	music, photos, album art, video, games	3091
iPod touch	8GB	★★★½	$260	3.5-inch color	22 hours of music playback; 5 hours of video playback	music, photos, album art, video	3092
	16GB	★★★½	$326	3.5-inch color	22 hours of music playback; 5 hours of video playback	music, photos, album art, video	3093
	32GB	★★★★	$444	3.5-inch color	22 hours of music playback; 5 hours of video playback	music, photos, album art, video	3365
iPod nano	4GB	★★★★½	$144	2-inch color	24 hours of music playback; 5 hours of video playback	music, photos, album art, video, games	3094
iPod nano	8GB	★★★★½	$193	2-inch color	24 hours of music playback; 5 hours of video playback	music, photos, album art, video, games	3095
iPod shuffle	1GB	★★★★	$49	none	12 hours of music playback	music	2238
	2GB	★★★★	$69	none	12 hours of music playback	music	3470

[A] From a PriceGrabber survey of retailers as of July 8, 2008. [B] Typing in find codes after *macworld.com/* directs you to a product's review or overview. For example, macworld.com/3092 contains an overview of the 8GB iPod touch.

SMITH

Software Treasures

53 inexpensive Mac Gems—no digging required

There's a wealth of free and low-cost Mac software available on the Net—the problem is sifting though that treasure chest and finding the programs that truly shine. That's where we come in: *Macworld*'s staff spent hours researching and testing free and low-cost programs, and we've come up with this list of Mac software treasures. We've also included favorites from our monthly *Mac Gems* column and our Mac Gems Weblog (macworld.com/macgems). We're sure you'll find several precious programs in the next few pages.

Illustration by Tyson Smith

System Sparklers

UTILITY

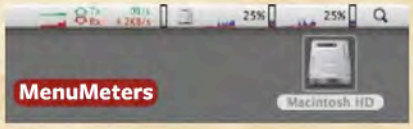
Changes 1.0.4

Changes 1.0.4 (★★★½) can help you coordinate the contents of two folders. Just point Changes to two folders (or even two volumes, or a local folder and a shared resource), and it shows you—in an easy-to-use interface that provides detailed information and Quick Look previews—exactly which files and folders differ, as well as which ones exist in only one location. Changes can then merge the two folders so you have the latest versions and the same contents in each; you can manually override merging for particular files and folders ($40; Skorpiostech, www.changesapp.com).—DAN FRAKES

UNIX

Lingon

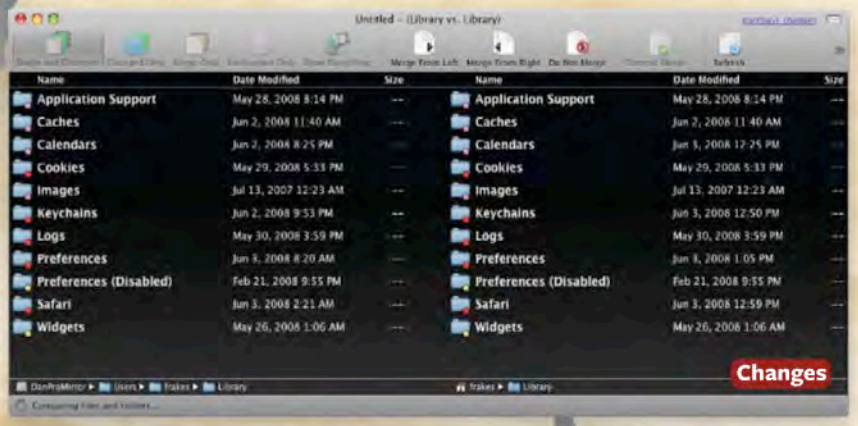
If you tinker with OS X's Unix side, Lingon (★★★★) may interest you. For years, the way to schedule tasks in Unix was through a scheduler called `cron`. While OS X still supports `cron`, the approved way to schedule tasks is now a program known as `launchd`. Unfortunately, writing a `launchd` task is much more complex than writing a `cron` task. Enter Lingon, which lets you create `launchd` tasks via a simple GUI. You just enter some information about your task, including the Unix program you'd like to run and the conditions that program will run under, and then click on Save. If you desire, you can directly edit the XML by clicking on the Expert Mode button—though I've never needed to do so with the relatively simple scheduling tasks I've used Lingon for (payment requested; Peter Borg, lingon.sourceforge.net).—ROB GRIFFITHS



UTILITY

MenuMeters 1.3

Curious about what's going on with your system's CPU, drives, network activity, or memory usage? While there are many apps that can track these things for you, my personal favorite is MenuMeters 1.3 (★★★★½). Through highly customizable, constantly updated menu-bar icons, you can view indicators for any or all of these four activity categories. For each indicator, you can specify how often it's updated, the type of icon and colors used, and activity-specific settings. When you click on an indicator in the menu bar, a contextual menu displays even more information. Click on the CPU icon, for instance, and you'll see not only CPU usage but also your system's uptime, the average system load, and two menu items you can use to launch Console or Activity Monitor. Great for information freaks, MenuMeters presents tons of detail in a well-designed and minimally intrusive interface (payment requested; Raging Menace, www.ragingmenace.com).—RG



SECURITY

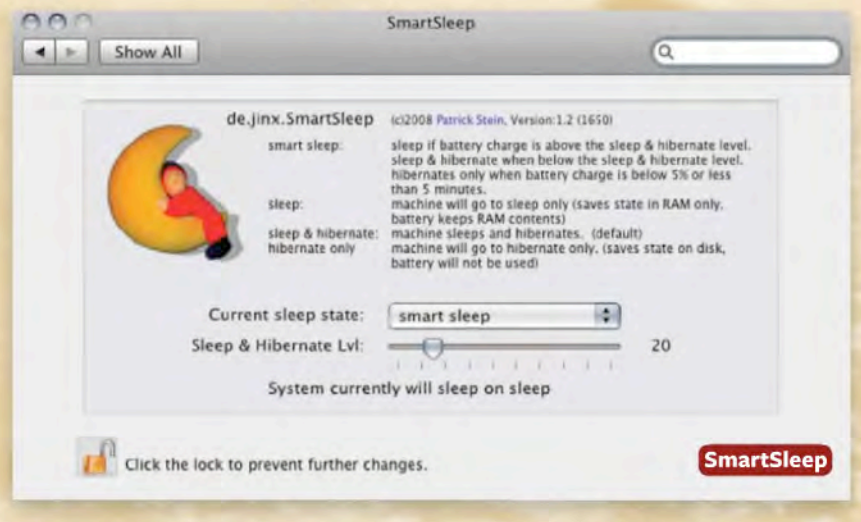
NoobProof 1.1 and WaterRoof 2.1

Mac OS X's built-in firewall—an implementation of the Unix program `ipfw`—works well, but Apple offers very few configuration options. NoobProof 1.1 (★★★★) and WaterRoof 2.1 (★★★★) are utilities that make such customization possible. For example, you can create rules that allow or deny access to particular ports (generally or by originating IP address), block Nmap or ICMP traffic and dangerous data packets, log denied connections, and export and import firewall rules. NoobProof's easy-to-use approach is designed for everyone. WaterRoof, for more-advanced users, adds dynamic rules, NAT, port forwarding, rule sets, a bandwidth manager, network monitoring, log reports, and firewall-debugging tools (payment requested; Hanynet, www.hanynet.com).—DF

UTILITY

ScreenRecycler 1.18

Wish your Mac had another display so you could spread out your workspace? Most Macs support multiple displays, but if yours doesn't—or if you don't want to buy another monitor—ScreenRecycler 1.18 (★★★½) lets you use another *Mac* as your second screen. Using VNC—the technology behind Leopard's Screen Sharing feature—ScreenRecycler


SmartSleep
Show All
de.jinx.SmartSleep
(c)2008 Patrick Stein, Version: 1.2 (1650)
smart sleep:
sleep if battery charge is above the sleep & hibernate level. sleep & hibernate when below the sleep & hibernate level. hibernates only when battery charge is below 5% or less than 5 minutes.
sleep:
machine will go to sleep only (saves state in RAM only. battery keeps RAM contents)
sleep & hibernate:
machine sleeps and hibernates. (default)
hibernate only
machine will go to hibernate only. (saves state on disk, battery will not be used)
Current sleep state:
smart sleep
Sleep & Hibernate Lvl:
20
System currently will sleep on sleep
Click the lock to prevent further changes.
SmartSleep

"connects" one Mac's screen to another Mac's over your local network. Performance isn't as good as that of a direct display connection, but for palettes and other undemanding items, the virtual display works well ($25; Jinx.de, www.screenrecycler.com).—DF

BACKUP

SmartBackup 2.2.5

SmartBackup 2.2.5 (●●●½) has most of the usual features of a good backup program, including incremental and bootable backups, network backups, and the ability to retrieve backed-up files via the Finder. But it's unique in that it also lets you use saved Spotlight searches to define files to be backed up. This gives you the flexibility to, for example, include or exclude files from your backups, using file type, file extension, and even Finder label as criteria. The developer has also included presets for personal files (such as Mail, iCal, and Safari data) hidden outside of your Documents folder, as well as Automator and Terminal integration. Although scheduling isn't provided, you can use the included Automator action to schedule backups via iCal ($23; Freeridecoding, freeridecoding.com).—DF

UTILITY

SmartSleep 1.4

When a Mac laptop in hibernation mode is put to sleep, a copy of its RAM contents is written to disk. This lets you do things like swap out the laptop battery without losing any information, as the system reads the disk image when you wake it up with the new battery. In general, this is an excellent feature, but it does have its downsides—it takes longer to put your Mac laptop to sleep, and you lose as much drive space as you have RAM. Smart Sleep 1.4 (●●●●), a System Preferences pane, lets you choose between four different sleep modes: the default mode (sleep and hibernate), sleep only (no RAM written to disk), hibernate only (power fully off), and a new "smart sleep" mode, in which your machine will generally just sleep but will hibernate when the battery is below a certain power level that you can specify via a slider—for instance, five percent. You can easily toggle between these modes, changing your settings as conditions require (free; Patrick Stein, www.jinx.de).—RG

UTILITY

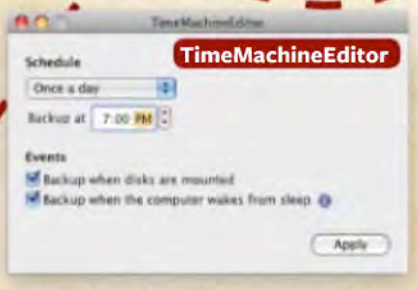
SuperDocker 2.4.4

For people who don't like Leopard's 3-D Dock, SuperDocker 2.4.4 (●●●●) offers variations that you can implement with a few mouse clicks. You can switch to the 2-D Dock or replace the 3-D Dock's background, separator, or active-program indicator. SuperDocker includes about 20 backgrounds, such as wood paneling and a shiny coffee table, as well as about ten dock dividers and active-program indicators. A live preview shows how your Dock will look when you implement changes; when you like what you see, click on Apply Changes to activate your new Dock. SuperDocker also lets you tweak various hidden preferences for stacks, Finder activities, Safari, Time Machine, and other programs. You can click on a question mark to see an explanation of what the selected item does, before you change a setting. The easy-to-use interface provides access to all functions, and you can easily revert to the previous Dock, via the Restoration tab (payment requested; Ed-Shiro, www.ed-shiro.net).—RG

UTILITY

Tidy Up 1.4.3

Duplicate files are a fact of life in today's world of superhuge, multiterabyte hard drives. Tidy Up 1.4.3 (●●●●) is a powerful way to find and remove these space wasters. It lets you choose the hard drives and folders it searches in for duplicates. You then use your own conditions to build a query that identifies duplicate files—you're not limited to simple file-name comparisons. You can compare files' modification dates, creation dates, types, extensions, creators, and sizes, as well as the contents of data and resource forks; you can even find



out whether a file is empty. There's also a predefined set of tasks that's accessible via a drop-down menu. You can find duplicate iPhoto images, iTunes songs, and applications through this menu, for instance. A 60-page manual explains all these options in an easy-to-follow manner ($30; Hyperbolic Software, www.hyperbolicsoftware.com).—RG

BACKUP

TimeMachineEditor 1.3.1

Leopard's Time Machine feature backs up changed items every hour. In many cases, this is great, because it means that you'll never lose more than an hour's worth of work. But in case you've ever wanted to change Time Machine's schedule—for example, because you don't *need* to back up so often—TimeMachineEditor 1.3.1 (4 stars) lets you do just that. You can tweak the interval so that Time Machine backs up every four hours, say, or you can choose to have Time Machine back up once a day, once a week, or once a month. You can also choose to have Time Machine back up automatically whenever a Time Machine disk is mounted or whenever your Mac wakes from sleep (free; Time Software, timesoftware.free.fr).—DF

UTILITY

Warp 1.1.1

One of the biggest complaints about Leopard's Spaces feature is that you can't switch between workspaces by dragging your cursor to the edge of the screen. Warp 1.1.1 (4 stars) fixes this omission and adds several other useful features; among my favorites is the option to display a preview of an adjoining workspace before you decide to switch to it (payment requested; Kent Sutherland, www.ksuther.com).—DF

The Best of Mac Gems

Every month in the *Mac Gems* section of this magazine, and twice a week in the Mac Gems blog (macworld.com/macgems), we take a look at the top low-cost (and sometimes free) Mac software. We've found several that sparkle brighter than the rest. Here are ten of those top-rated Mac Gems, discovered since the summer of 2007.

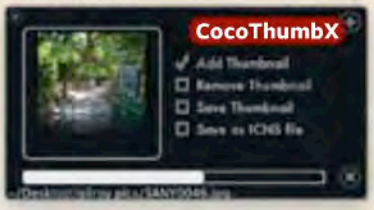
AIRFOIL 4½ stars; MACWORLD.COM/3688
Airfoil allows you to send audio from any Mac program—not just iTunes—to multiple AirPort Express units.

AUDIOBOOK BUILDER 4½ stars; MACWORLD.COM/3689
Audiobook Builder automates the process of properly preparing files ripped from a CD audiobook so the files appear as a true audiobook.

CARBON COPY CLONER 4½ stars; MACWORLD.COM/3156
This utility clones a Mac OS X storage volume, making an exact copy that you can use as a startup disk. Features include block-by-block cloning, incremental cloning, and more.

COCOTHUMBX 4½ stars; MACWORLD.COM/3690
With a simple drag and drop, CocoThumbX creates a 128-by-128-pixel thumbnail icon from a file and automatically embeds it in the file's resource fork. You can also use CocoThumbX to remove a thumbnail from an image, as well as batch-process several files at one time.

FINDERPOP 4½ stars; MACWORLD.COM/3691
This contextual-menu enhancer lets you view and work with the contents of a folder or volume by simply control- or right-clicking on that item in the Finder. You can also perform a number of standard Finder actions on files within the menu, without having to open the files.



LAUNCHBAR 5 stars; MACWORLD.COM/3545
LaunchBar uses the keyboard and a lot of software intelligence to control your Mac, reducing the amount of time you spend with your mouse.

LITTLE SNITCH 4½ stars; MACWORLD.COM/3693
Firewalls screen your Mac's incoming network traffic, but what about outbound traffic being sent by your programs, unbeknownst to you? Little Snitch watches the traffic your Mac is sending and gets your permission before it's sent.

MSGFILER 4 stars; MACWORLD.COM/3692
This Apple Mail add-on lets you file e-mail and more by using keyboard shortcuts and keystrokes instead of the mouse.

UNISUDOKU 4½ stars; MACWORLD.COM/3694
UniSudoku forgoes the fancy visuals of other Sudoku offerings in favor of a clear and clean interface. It gets the game play right and has useful features.

XSCOPE 4½ stars; MACWORLD.COM/3695
Designers will like xScope, which combines a number of on-screen measurement tools for measuring the sizes and locations of on-screen elements.

Graphic Fortunes

PHOTOGRAPHY
Bracketeer 3.2.4

To capture the full range of tones in a scene, photographers take multiple shots at different exposures and then combine them in an image editor such as Adobe Photoshop. With Bracketeer 3.2.4 (★★★½), you can try this technique without spending $649 for Photoshop. This program takes advantage of the command-line utility Enfuse, which merges bracketed exposures into a single image. You'll want to combine the utility with an image editor such as Adobe Photoshop Elements, to bring out the best in your resulting images ($30; Pangea Software, www.pangeasoft.net).—KELLY TURNER

GRAPHICS
Doozla 1.1

Doozla 1.1 (★★★★) is one of the best painting and drawing programs for kids. Its intuitive interface is clear, and you get a nice, clean drawing area with seven built-in drawing tools, some simple file-management buttons, and a color palette. Click on a tool, and a chirpy voice tells you what it is. For creative kids, Doozla is great ($25; plasq, www.plasq.com).—DAN R. MILLER

GRAPHICS
FlySketch 1.6.3

FlySketch 1.6.3 (★★★½) is a simple drawing tool that doubles as a screen-capture utility. Its elegant, self-contained interface includes an adjustable window that opens and sits atop other windows on your desktop, while it operates in the background of your Mac. A slider lets you adjust the view from opaque to transparent, so you can see images and text beneath the canvas. You can annotate your picture with a highlighter tool, draw on it, create boxes and circles, and otherwise design a unique image. You can then use the built-in scripts to e-mail, save, or transport your picture ($25; FlyingMeat, www.flyingmeat.com).—JACKIE DOVE

INTERNET
iP2F 1.0.3

If you use iPhoto to store your photos, and you want to upload your photos to Flickr, consider Tagtraum Industries' iP2F 1.0.3 (★★★★). This iPhoto plug-in's well-designed interface lets you set photo titles, tags, and image descriptions; assign photos to photo sets or Flickr pools; and quickly scale a batch of images. It automatically picks up any keywords or titles you've assigned in iPhoto. This plug-in can also transfer some information in the other direction: it will apply the titles and descriptions (but not the keywords) you've added in it to your iPhoto library, a nice feature for those of us who don't pay attention to such things until we're ready to share our photos with the rest of the world ($15; Tagtraum Industries, www.tagtraum.com).—KT

GRAPHICS
Plopp 1.2.5

Plopp 1.2.5 (★★★½) is a fun and easy 3-D drawing tool for kids. Just draw your figure in 2-D, and then click on a bicycle-pump icon to "blow up" the figure into 3-D. Don't like your 3-D result? You can "pop" it with a virtual pin. Unfortunately, Plopp's interface is stuck at 800-by-600 resolution, and there are no animation tools. But you can print your creations, export them as JPEGs, or send them via e-mail. Plopp comes with premade characters and backgrounds, and you can download more for free ($20; Impara, www.planet-plopp.com).—ROMAN LOYOLA

GRAPHICS
Scribbles 1.2.1

Sometimes you just need to be creative and make a little art without a lot of complexity. Scribbles 1.2.1 (★★★½) allows you to do just that, with an approach that combines a simple interface with clever design. The tools are limited but satisfying to wield. The 3-D interface allows you to flit between layers, and the canvas is as big as your imagination needs it to be. Image quality is always high with Scribbles; you can zoom and adjust your image as much as you like without the image getting pixelated ($20; atebits, www.atebits.com).—HEATHER KELLY

Productivity Prizes

PRODUCTIVITY

CaliBrate 1.2.2

The nifty CaliBrate 1.2.2 (★★★★) lets you batch-modify iCal events; you can move events between calendars, delete events, change times, edit titles and notes, set locations and URLs, edit attendees, modify alarms, and more. You can perform these actions on all events, or on events for a specific calendar. Alternatively, you can search for events by date range, title, or notes; CaliBrate will then perform your actions only on matching events ($8; Wooden Brain Concepts, www.woodenbrain.com).—DF

PRODUCTIVITY

Espy 1.0

Espy 1.0 (★★★½) is an address book with an iPhoto-inspired interface that lets you view gloriously large image thumbnails as you sift through your contacts. Espy uses the same database as Apple's Address Book and has basic features—you can drag and drop photos to add them to a contact, create groups, export contacts as vCards, add fields, and more. You'll need to start taking pictures of new contacts, which may not always be practical. But it could be a way to help establish a new relationship ($25; GoGoalSoft, www.gogoalsoft.com).—RL

PRODUCTIVITY

LicenseKeeper 1.4.1

LicenseKeeper 1.4.1 (★★★★) keeps your software license information in one convenient place. It doesn't require a lot of painstaking data entry—an Import App button creates a new entry for each program, along with the version number and other data. The utility also has an Attach Email feature that lets you import order confirmations from Apple Mail, Microsoft Entourage, and PowerMail. The only thing missing is password encryption for safeguarding your data ($20; Outer Level, www.outerlevel.com).—PHILIP MICHAELS

PRODUCTIVITY

Mémoires 1.2.43

As a note-taking and data-storing utility, Mémoires 1.2.43 (★★★½) has limited features. But its simple interface makes it ideal for keeping a basic personal journal. Just click on a date in Mémoires' calendar and then click on the plus-sign (+) button to create a new entry for that date. Mémoires provides the same formatting options as TextEdit, including the ability to embed images. Mémoires can use AES-128 encryption to encrypt your data so your private thoughts always stay private ($28; Coding Robots, www.codingrobots.com).—DF

UTILITY

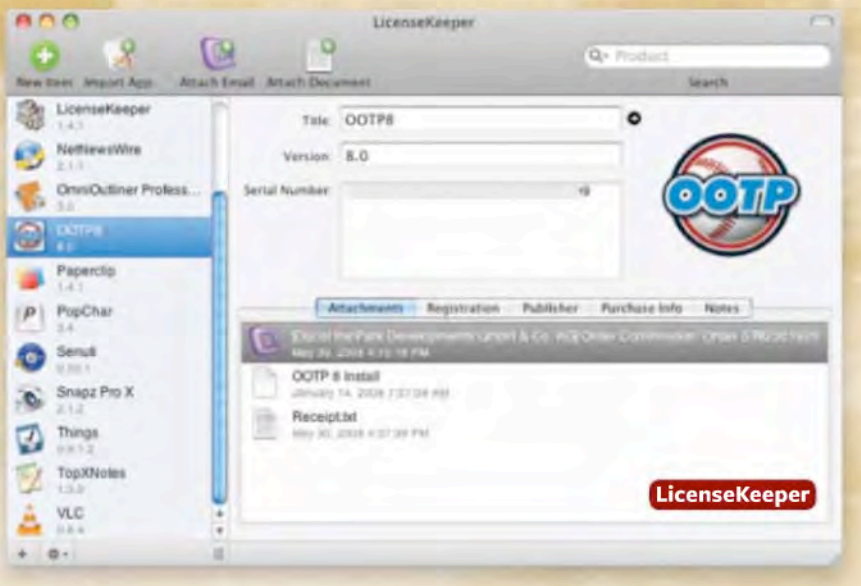
Name Mangler 2.0

When I have a bunch of files to rename, Name Mangler 2.0 (★★★★½) is my favorite tool to use. You just drag your files into its window, choose your renaming options, and click on a button. The range of easy-to-use renaming options includes finding and replacing, numbering, changing case, setting extensions, and more. There's even a mode with a special scripting language for more-advanced procedures (payment requested; Many Tricks, www.manytricks.com).—DF

PRODUCTIVITY

PopChar X 4.0.1

PopChar X 4.0.1 (★★★★) can help you get a handle on typing special symbols, like grave accents, tildes, Greek letters, and more. Click on the PopChar icon in the menu bar, and a floating table of characters will appear. PopChar displays both ASCII and Unicode characters, as well as all available characters in all fonts.



PopChar even displays the proper keyboard combination and hexadecimal number for the symbol ($47; Ergonis Software, www.ergonis.com).—PM

PRODUCTIVITY

Smultron 3.5

Smultron (★★★★) isn't as feature-rich as other text editors like BBEdit or TextWrangler. However, Smultron's interface is less daunting than those of some of its competitors and can be customized to your liking. Smultron includes colored syntax highlighting for many programming languages, it works with OS X's Services menu and built-in spelling checker, and it doesn't require a ton of memory or CPU power (free; Peter Borg, smultron.sourceforge.net).—RG

PRODUCTIVITY

TinyCal 1.4

TinyCal 1.4 (★★★½) gives you a drop-down calendar—displaying one, two, three, or twelve months. What makes TinyCal unique is that it syncs with Google Calendar; click on any date, and you can quickly view that day's scheduled events. TinyCal also lets you add events to any of your Google Calendars ($10; Pixelated Software, www.pixelatedsoftware.com).—DF

PRODUCTIVITY

TopXNotes 1.3

TopXNotes 1.3's (★★★★) QuickNotes feature is what sets this application apart from note-taking programs. Designate a note as a QuickNote, and you can access it from the drop-down menu of a floating palette that always appears on top of other applications. This lets you open notes quickly, without having to toggle through applications or losing sight of the window you're working in. Other features include note grouping, the ability to open multiple notes at once, and password protection ($35; Tropical Software, www.tropic4.com).—PM

WEB & INTERNET

Twitterrific 3.1

If you've tried social-networking service Twitter (www.twitter.com) only via its Web site, you're getting only half the experience: Twitterrific 3.1 (★★★★½) is the way Twitter is meant to be used. You can set its window to pop up at an interval you specify or summon it manually via a keyboard shortcut. There's support for the Growl notification framework, the ability to delete your own tweets, and the spiffy, top-secret sonicTwooshTechnology. A free, ad-supported version is also available. The only thing Twitterrific can't do is solve Twitter's persistent reliability issues ($15; The Iconfactory, www.iconfactory.com).—DAN MOREN

Welcome Distractions

All work and no play—well, you know the rest. Here's a trio of jewels for when you need a break from the grind.

BLACK INK 1.1.2

Black Ink 1.1.2 (★★★★) lets you solve crossword puzzles and allows you to check your answers at any time (as long as the puzzle has an unlocked answer key). It connects to the OneAcross Web site for help with clues, and it can print out puzzles for you to take on your next vacation. Black Ink doesn't remember custom interface sizes between puzzles or relaunches, and there's no way to enter an unlock code for *New York Times* puzzles—but the program is much better than the stale (albeit free) Across Lite ($25; Red Sweater Software, www.red-sweater.com).—JONATHAN L. SEFF

Simple Comic

SIMPLE COMIC 1.6.1

Sometimes all you want to do is read a comic book. And that's the beauty of Simple Comic 1.6.1 (★★★½), which gives you a fast, simple interface for reading comic books saved in PDF, CBR, and CBZ formats. It comes with a Quick Look plug-in, so Leopard users can get quick access to comics right from the Finder. Now if only the major comic companies would get with the program and provide more comics in downloadable form (payment requested; Dancing Tortoise Software, dancingtortoise.com).—JASON SNELL

TICKERSHOCK 2.0

Tickershock 2.0 (★★★½) displays RSS feed headlines. You can have Tickershock on all the time below your menu bar or at the bottom of your screen. See an interesting headline? Click on it, and a separate window opens to display the RSS summary of that story; click on the link in the window, and you'll go to the full story on the Web (free; Mesa Dynamics, www.mesadynamics.com).—ROMAN LOYOLA

Multimedia Riches

AUDIO

Join Together 5.2.1

Join Together 5.2.1 (★★★★) is an AppleScript Studio program that takes tracks from a playlist in your iTunes library and joins them into a single AAC-encoded file. Join Together is particularly useful for audiobooks made up of many small files. It can not only join these tracks but also save them in iTunes' .m4b audiobook file format (free; Doug's AppleScripts for iTunes, dougscripts.com/itunes).—CHRISTOPHER BREEN

AUDIO

Levelator 1.4.0

Produce a couple of podcasts that involve more than one speaker, and you'll learn something about the tender art of balancing track volumes. He's loud, she's quiet, the other guy is sometimes loud and sometimes quiet. Levelator 1.4.0 (★★★★) makes a noble effort to correct uneven volume levels. And it couldn't be easier to use—just drop AIFF or WAV files on the application, and it does the job (free; The Conversations Network, www.conversationsnetwork.org).—CB

VIDEO

Lostify 0.7

Videos bought from the iTunes Store come nicely tagged with all the relevant information. Other files—those ripped from a DVD, downloaded from the Web, or created in iMovie, for example—need a bit of help. Lostify 0.7 (★★★★) gives you complete control over tagging your MPEG-4 files with data such as episode name, episode number, series title, and more, and it lets you lock fields—useful when you're tagging multiple episodes of a TV series, say. Lostify integrates with iTunes to send tagged files in the Finder to iTunes, and modify and update files already in your iTunes library (payment requested; Lowell Stewart, www.lostify.com).—JONATHAN L. SEFF

VIDEO

MetaX 2.4.5

When you rip movies from your personal DVD collection, you could tag them manually with a program such as the aforementioned Lostify. But why not save yourself some data entry with MetaX 2.4.5 (★★★★½), which connects to Amazon.com stores in six different countries, as well as the tagChimp (www.tagchimp.com) community-generated tagging site? Just drag an MPEG-4 video into MetaX's search box, wait for MetaX to return results, pick the one you like, and then tell the software to write

the tags. You can include poster art, DVD cover art, a frame from the movie as artwork, and much more (payment requested; Rodney Kerstetter, www.kerstetter.net).—JLS

AUDIO

Narrator 2.0.2

The Mac's default text-to-speech tools don't always let you specify which voice will do the reciting, or let you assign different voices to different parts of a document. That's a problem if you're writing a play or a movie, or if you want to hear what different people said in a meeting you took notes in. And that's the problem Narrator 2.0.2 (★★★½) solves. Paste your text into it, assign the program's "characters" to their lines, and then hear your text come to life. Narrator can use any of OS X's built-in system voices; if those voices aren't enough, you can download more from Dejal ($19; Dejal, www.dejal.com).—DRM

iPOD

PodWorks 2.9.3

Data loss is particularly painful when that data is your iTunes library. Thankfully, a copy of the library can often be found within your iPod or iPhone. PodWorks 2.9.3's (★★★★½) job is to copy the library from your pocket to the inside of your

now trouble-free Mac. Like other utilities, it copies all your media from your iPod via the iPod's data cable. Unlike some other utilities, it also copies your playlists, ratings, and play counts. Plus, it works with the iPhone and iPod touch and can run directly from a click-wheel iPod ($8; Sci-Fi Hi-Fi, www.scifihifi.com).—CB

AUDIO

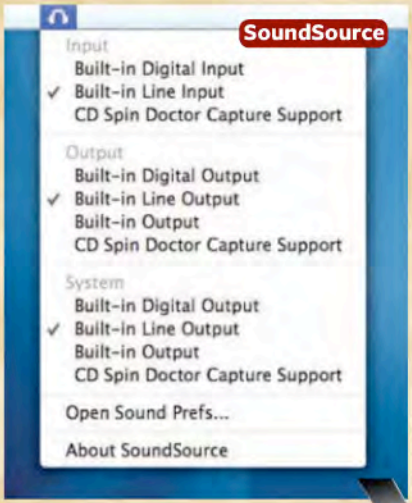
SonicMood 4.8.6

Yeah, I'm the guy who haunts the iTunes Store's Ambient aisle. So I sometimes have trouble sleeping—you wanna make something of it?! But the iTunes Store will likely see less of me at 3 a.m., thanks to SonicMood 4.8.6 (★★★★), an ambient-sound generator. Playing a combination of moody synthesized instruments and digitized nature sounds, the highly configurable SonicMood generates the kind of relaxing audio ambience that will soothe even the most restless insomniacs. Sure, the program's interface looks like it was built in the late 1990s, but the benefit is in the listening, not the looking ($13; Bit of Paradise Products, www.sonicmood.com).—CB

AUDIO

SoundSource 2.0

You love your Mac's audio capabilities—so much, in fact, that you've jammed every audio port on your Mac with plugs. Impressive as all these available input and output sources may be, isn't it kind of a bother to constantly hop to the Sound preference pane to switch from one to another? This task can now be filed under "unnecessary," thanks to Rogue Amoeba's free SoundSource 2.0 (★★★★). This simple utility adds a menu-bar item that lists all available Input, Output, and System audio options. To make a change, simply select the setting you want from the menu (free; Rogue Amoeba, www.rogueamoeba.com).—CB



VIDEO

TransformMovie 1.1

Ever record a video on your point-and-shoot camera while holding it in portrait mode? Your recorded videos are still in landscape mode, so your videos are tilted sideways. To rotate your videos, you could pay $30 for QuickTime Pro (www.apple.com)—but consider TransformMovie 1.1 (★★★½). TransformMovie lets you rotate movies from 1 to 360 degrees; anything other than 90-degree increments results in a black frame around your movie. TransformMovie also lets you flip video images horizontally or vertically, or scale them up or down (payment requested; Limit Point Software, www.limit-point.com).—RL

INTERNET

Transmission 1.22

BitTorrent is the peer-to-peer protocol of choice for transferring large files quickly. As a BitTorrent client for OS X, Transmission 1.22 (★★★★½) is fast and lightweight, and—even though it's available for other platforms—behaves like a Mac program. Don't be fooled by its simple, intuitive interface—it has plenty of power. You can set up Transmission to watch a particular folder for torrent files and begin downloads automatically, set upload and download speed restrictions globally or for individual files, and even configure the program to prefer encrypted peers (payment requested; Transmission Project, www.transmissionbt.com).—DM

INTERNET

TubeTV 1.0

TubeTV 1.0 (★★★½) is a straightforward, basic YouTube video downloader. Just enter the URL of the YouTube video into TubeTV (or use the Search field) and click on the Download Movie button, and TubeTV saves the video to your Mac. TubeTV can also convert the video for your iPhone, Apple TV, or iPod (payment requested; Chimoosoft, www.chimoosoft.com).—RL

iTUNES

Typecast

What if you've got a file you wish were in a podcast—say, an interview downloaded from the Web—but that isn't? Typecast (★★★½) solves this problem by creating a phony podcast in iTunes and filling it with whatever files you drag into its window. It's a bare-bones tool that fills a small but vital niche (free; Red Sweater Software, macworld.com/3037).—JASON SNELL

Jason Snell is *Macworld*'s editorial director. **Philip Michaels** and **Dan R. Miller** are *Macworld* executive editors. **Christopher Breen**, **Jackie Dove**, **Dan Frakes**, **Rob Griffiths**, **Roman Loyola**, **Jonathan L. Seff**, and **Kelly Turner** are *Macworld* senior editors. **Heather Kelly** and **Dan Moren** are *Macworld* associate editors.

Building off the success of the iPod, the iPhone gave new meaning to a strong product launch—it made people actually want to wait in line for a phone. But that was last year. How could Apple top 2007's achievement? A trifecta in the form of the iPhone 3G, a major software update for old and new iPhone and iPod touch users alike, and a store for downloading and installing applications to your mobile device.

So how did Apple do in 2008? To find out, read on. We've reviewed the iPhone 3G and the 2.0 software update here, and we've picked out some of the coolest programs from the App Store to show users what's available now—and the promise of things to come.

iPHONE 2.0

New features, faster speeds: We review the iPhone 3G and the new

iPHONE 3G REVIEW
PAGE 62

iPHONE 2.0 REVIEW
PAGE 66

iPHONE APPS
PAGE 68

iPhone software

PHOTOGRAPHY BY PETER BELANGER

REVIEW

iPHONE 3G

People who waited for version 2.0 will find their patience rewarded **BY JASON SNELL**

Massive hype and long lines greeted the original iPhone, and with Apple's new iPhone 3G, the hype and the lines are back. People who waited for the second edition of the iPhone will appreciate its dramatically faster cellular data access, impressive software update, and raft of third-party programs. But existing iPhone owners will find that the iPhone 3G is only a must-have upgrade for people who will take full advantage of the fast 3G network.

Subtle Hardware Changes

At a casual glance, the iPhone 3G looks just like the original iPhone (★★★★; macworld.com/2957). Front and center is its bright, beautiful, 3.5-inch–diagonal touch screen, offering a resolution of 480 by 320 pixels. The face of the iPhone 3G is slightly wider, allowing a bit more black space between the sides of the screen and the chrome frame.

At the top, the most obvious change is the replacement of the original iPhone's ridiculous recessed headphone jack—which required the use of an adapter in order to attach most non-Apple headphones—with one that lies flat.

The iPhone 3G's side and top buttons are now made of metal rather than black plastic. They're a pretty color, but the edges are also much sharper than those on the original iPhone, and they press uncomfortably into my fingers. I also found the iPhone 3G's Vibrate switch to be more difficult to slide than the original model's.

Although the iPhone 3G is more curved (and therefore thinner) than the original iPhone at its edges, it's slightly thicker in the middle. The curved back does make the iPhone 3G slightly unstable when laid on a flat surface, but it only wobbles slightly, and I found it acceptably stable for typing and tapping.

The iPhone's back is shiny plastic (available in black [8GB and 16GB] or white [16GB]), rather than the flat matte aluminum of the original model. The plastic case shouldn't block radio signals as much as the aluminum did, but the shiny texture is also much more adept at collecting fingerprints and smudges.

Although the physical changes to the phone are subtle, they're enough to prevent some old iPhone cases, docks, and other accessories from working with this new model.

It's always hard to judge a new product's durability in just a few days, but our colleagues at *PC World* sacrificed an iPhone 3G (macworld.com/3732) to test its resilience, and were quite impressed.

Speed Improvements

What puts the iPhone 3G head and shoulders above the original iPhone is the addition of support for the third-generation wireless networking, or 3G, that gives the product its name.

In our tests, an iPhone 3G on AT&T's 3G network downloaded media files and loaded Web pages between two and four times as fast as an original iPhone on AT&T's EDGE network (but not as fast as Wi-Fi). See "Download Speeds Compared" for our results.

iPHONE 3G

★★★★

PROS: Bright, high-resolution screen; fast cellular network; built-in GPS; iPhone 2.0 software includes support for Microsoft Exchange and third-party apps; good audio quality; no recessed headphone jack.

CONS: Low-quality camera with no video-recording support; no built-in voice dialing; limited Bluetooth functionality.

PRICE: 8GB with two-year contract, $199; 16GB with two-year contract, $299

COMPANY: Apple, www.apple.com

Download Speeds Compared

	TIME TO DOWNLOAD 1MB MP3	TIME TO LOAD WEB PAGE 1	TIME TO LOAD WEB PAGE 2	TIME TO LOAD WEB PAGE 3
iPhone 3G (3G)	21	21	18	11
iPhone 3G (Wi-Fi)	**8**	**15**	13	**7**
iPhone (Wi-Fi)	***8***	*16*	***12***	***7***
iPhone (EDGE)	*87*	*65*	*51*	*22*

Shorter is better. Best results in **bold**. Reference systems in *italics*. Times are in seconds. Phones loaded cellular data simultaneously in the same location. Using Safari, they downloaded a 1MB MP3 file and then three Web pages to completion. Test Web sites were the Macworld.com home page, PCWorld.com home page, and AltonBrown.com home page, respectively.—MACWORLD TESTING BY JASON SNELL

More impressive than the raw download speeds is the fact that they enable Internet features that simply weren't practical on the slower EDGE network. I was able to listen to a radio station streamed through the free AOL Radio program, and watch baseball highlights via MLB.com At Bat, both over the 3G network (see page 68 for more on MLB.com At Bat and other new iPhone apps).

Phones on the 3G cellular network also gain the ability to download data (loading Google Maps, for example) while you're on a call.

Built-in GPS

The other major new hardware addition to the iPhone is a GPS (Global Positioning System) receiver that lets the device figure out exactly where it is by triangulating radio signals from satellites in orbit. (And if the iPhone 3G can't get a GPS fix, it can still use Wi-Fi and cell tower information to guess at its position.)

iPhone's camera can also use GPS to embed the exact latitude and longitude of every picture you take, a process known as *geotagging*.

Of course, the killer application for a GPS-enabled phone is turn-by-turn driving directions, which Maps doesn't truly offer. Here's hoping that an add-on program appears on the App Store soon.

Improved Audio

The speaker on the iPhone 3G is noticeably louder than the one on the original iPhone, making ringtones easier to hear and improving the speakerphone function.

The phone's internal speaker (the one you press against your ear) also sounds better and is a little bit louder—when I called people on the two phones, they generally preferred the sound of the iPhone 3G.

What's more, the frequencies used on the 3G network are, compared with those on the 2G network, not as likely to generate random interference. I was able to set the iPhone 3G right next to my clock radio, and never heard that famous GSM buzz. (Of course, if you're in an area that doesn't have 3G service, you'll be on the old, buzz-happy GSM network.)

> Here's hoping that a program that uses the iPhone 3G's built-in GPS to give precise driving directions appears on the App Store soon.

Several included applications on the iPhone take advantage of GPS, and numerous third-party App Store programs do as well. Maps, for example, uses GPS to track your current location, represented by a pulsating blue dot at the center of the map. In my testing, Maps did a good job in wide-open spaces, but not as well while I was traveling in a bus through streets full of tall buildings in San Francisco's Financial District. The

Outie No longer recessed, the iPhone 3G headphone jack supports plugs of all sizes and shapes.

Lingering Lapses

When the original iPhone arrived, it was easy to give Apple a bit of a pass on missing features. However, now a year has gone by and the hardware has been completely revised—yet some of these feature gaps inexplicably remain.

Camera For a product as cutting-edge as the iPhone, its built-in camera is an embarrassment. Like the camera on the original iPhone, it's got a basic 2-megapixel resolution, doesn't zoom, has no flash, doesn't work well in low light, and doesn't take videos.

Bluetooth Taking a step backward, Apple has removed the feature that let you listen to voice mail via a Bluetooth headset (a company spokesperson says that Apple's working on a fix). And we've heard some reports of Bluetooth-enabled cars that have had trouble pairing with the device. You still can't exchange photos with Bluetooth, and despite the fact that the iPhone 3G has a very fast connection to the Internet, there is no way to share that connection with your Mac. The iPhone 3G also doesn't support stereo Bluetooth headphones, so you can't listen to music wirelessly.

Voice Dialing The iPhone still doesn't support voice dialing—unfortunate in a device that lacks the physical buttons to allow people to navigate solely by feel.

Power and Battery

The iPhone 3G tech specs claim a battery life similar to that of the original iPhone. However, Apple arrived at these figures under testing conditions that may not necessarily reflect your own use.

In tests performed by our sister publication, *PC World* (macworld.com/3733), the iPhone 3G's battery performed better than that of any other

Silver and Black The new iPhone reverses the color scheme of the original, with a black backplate and silver buttons.

phone in its class. In *PC World*'s talk-time tests, the iPhone survived 5 hours and 38 minutes—longer than 3G phones from AT&T, Palm, Samsung, Motorola, and Pantech.

Still, if you use the iPhone 3G heavily, you'll drain the battery pretty fast, and you won't be able to go a full day on one charge without some careful power management. If you're worried about running out of juice, Apple has provided an option (Settings: General: Network: Enable 3G) so that you can turn off 3G networking. Once 3G is disabled, the iPhone 3G uses less power by relying on the same 2G network as its predecessor.

Speaking of power, it's important to note that this phone is incompatible with any power adapters that use FireWire for charging. (This includes numerous accessories that don't actually have a visible FireWire cable, such as many car adapters.) The iPhone 3G will only accept a charge via the five-volt connection that's part of the USB power specification. And unlike the original iPhone, the iPhone 3G comes only with a USB charging cable and AC adapter, not a dock (now a $29 add-on).

The AT&T Factor

In the United States, iPhone 3G owners must commit to a two-year contract with AT&T, with rate plans that are $10 more per month than they were with the original iPhone. And since text messaging is no longer included, frequent texters will need to pay a fee above and beyond those plans to cover their texting (starting at $5 per month for 200—otherwise it's $0.20 per message).

If you're not sure AT&T is the right carrier for you, despite your interest in the iPhone, find someone who uses AT&T and who uses his or her phone in the same places you do, more or less. Or ask to borrow a friend's AT&T phone for a couple of hours and take it to the places you tend to use yours, so you can see for yourself. I've been an AT&T customer (previously Cingular, and before that AT&T) for years and have been relatively happy with the service, but many other people detest AT&T.

The Price

When we reviewed the original iPhone last year, a 4GB model cost $499. Over the past 12 months, Apple has slashed the price of the iPhone, has increased its capacity, and has now introduced these new iPhone 3G models, all of which provide a fine value. An iPhone 3G with twice the capacity of the original iPhone costs $300 less than that phone's initial sticker price.

Apple managed to drop the price so aggressively by changing its financial terms with AT&T, so that the telephone company pays Apple a subsidy for each iPhone sold. In essence, this means that with the iPhone 3G, consumers will pay for some of the value of the phone as a part of their monthly bills. For some users, this won't make any difference. For others, it's quite an inducement, because it trades a single large financial hit for a somewhat increased set of payments over a few years.

Unlike most Apple products, the iPhone is not a device with a single price—it's a complicated combination of a ticket price and a two-year monthly commitment. However, I think that making it cheaper to get your hands on an iPhone is a good move, even if the result is a higher monthly bill.

Macworld's Buying Advice

If you've been cautious and waited a year for the second generation of the iPhone, your patience has been rewarded. The iPhone 3G improves on the original iPhone's audio quality, offers access to a faster data network, and sports built-in GPS functionality. And since it includes the new iPhone 2.0 software, you'll also be getting in on the ground floor in the exciting new world of third-party software written for the iPhone. Business users will appreciate the iPhone's new Microsoft Exchange syncing features.

If you're an existing iPhone user, the fact that your current phone will be able to take advantage of all the iPhone 2.0 software features, including Exchange syncing and third-party applications, blunts some of the excitement of this upgrade. If you live in an area with a 3G network and find yourself chafing constantly at the comparatively slow speeds of the EDGE network, it's probably worth the upgrade. But if you don't mind the Internet experience on your current phone, you'd be better off installing the 2.0 software update and holding on to your existing device.

Jason Snell is *Macworld*'s editorial director.

Subtle Changes The iPhone 3G looks strikingly similar to the original iPhone, but it's slightly wider, allowing a larger frame around the edge of its 480-by-320-pixel touch screen.

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REVIEW

2.0 SOFTWARE

Latest version is still missing features, but it's a big step forward **BY DAN MOREN**

Applications Galore With more than 500 programs (and counting), the App Store lets you customize your iPhone as never before.

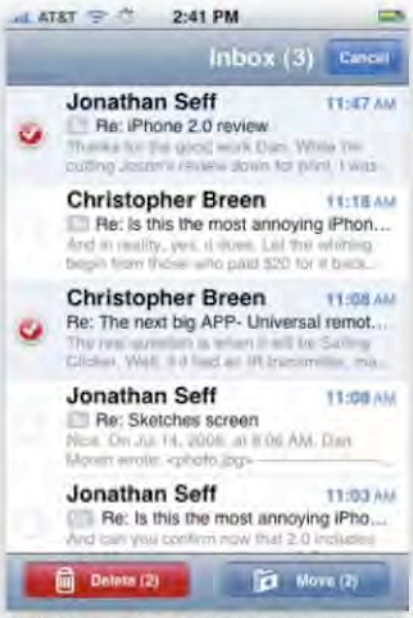
The original iPhone was an amazingly capable device, but it certainly wasn't perfect. The 2.0 software update, a major improvement over the original iPhone operating system, adds dozens of new features and refines several old ones—changes many users have been waiting for since the iPhone's introduction. Perhaps best of all, it's available free to all iPhone users and as a $10 upgrade for the iPod touch.

The App Store

The iPhone 2.0 software adds only one new application, but it's a gateway to an entirely new world. The App Store lets you download and install applications created by third-party developers (some programs for free, others at a cost).

You can add or remove applications as you see fit, but because they store all their data along with the software, deleting an application also deletes all its settings and stored information. If you delete a program and want it back, you can download it again for free, unlike media from the iTunes Store. You can also load applications associated with your iTunes account onto as many iPod touches and iPhones as you want, provided they're synced with your iTunes library.

Even though most of the applications are small, if you have many of them installed, syncing with your computer will take much longer than before.



Bulk Move and Delete The Mail application's timesaving bulk editing feature is great news for people who make heavy use of e-mail.

Mail

Managing e-mail on the iPhone is easier than ever. You can now delete or move multiple messages at once and specify backup SMTP servers for each of your accounts. In addition, the Mail application displays a number of new fields when you compose a message. You can now edit the blind carbon copy field and choose which of your e-mail accounts to use when sending a message.

Apple has also added better support for attachments—you can now view PowerPoint presentations and iWork documents and play back certain types of audio and video files. You can also save images (but not other files) sent to you as attachments.

Unfortunately, iPhone 2.0's version of Mail still lacks a couple of features that first-generation iPhone users have been clamoring for—in particular, a unified inbox and the ability to view and compose messages in landscape mode.

Enterprise Support

Many iPhone users were disappointed that the device was virtually useless in a corporate environment. The software update brings with it many enterprise features, including full support for Microsoft Exchange and its ActiveSync technology, which allows contacts, calendar, and mail information to be wirelessly "pushed" to the iPhone, automatically updating the device whenever that data changes on the server.

Once we set up accounts, we were able to access an Exchange e-mail account as well as retrieve contact and calendar information from the server. We were able to respond to Exchange event invitations attached to e-mail messages, something you can't do with iCal invitations on an iPhone. Unfortunately, if you sync contacts and calendars with Exchange, you can't also sync them with your Mac. To sync both at once, you'll need to use Apple's MobileMe service.

MobileMe

If you don't work for a big corporation but want to share all your messages, contacts, and calendar information between all your computing devices, Apple's $99-a-year MobileMe supports wireless syncing of contacts, calendars, and mail.

Unfortunately, there's still no way of syncing information from the iPhone Notes application with your Mac.

Location Services

The iPhone 3G may have true GPS, but iPhone 2.0 software brings its own refinements to the iPhone's location services. Using the location information it gleans from GPS, Wi-Fi signals, and cellular towers, the iPhone's Maps application has added an entirely new feature: tracking.

When you press the locate button in the lower left corner, Maps will continue to track your location until you press the button again. This feature works best with GPS capabilities, which provide close to real-time location information. But you can also use it without GPS—the results will just be less precise and will update less frequently.

Wireless Options

Earlier iPhone software gave you the option of either disabling Bluetooth or Wi-Fi individually, or shutting off all the iPhone's radios by switching to Airplane Mode. iPhone 2.0 refines that a bit: now when you enter Airplane Mode, you can turn Wi-Fi back on without activating the cell phone features. That way, if you're on a flight that provides Wi-Fi access, you can still get on the Internet without violating FAA regulations or using up your battery so quickly.

Find Your Location Location tracking works best with the iPhone 3G's GPS, but it's also available to users of the iPod touch and the original iPhone.

The Little Things

In addition to these major changes, iPhone 2.0 is rife with small but welcome improvements.

For example, when you're entering a password, the field shows you the last typed character in plain text, making it easier to figure out when you've pressed the wrong key.

The iPhone lets you manage multiple calendars, color-coding them so you can easily tell them apart (although the colors don't necessarily sync from iCal). You can set a default calendar for events created on the iPhone, and you can browse different calendars. However, the Calendar still does not let you manage to-do lists or sync them between the iPhone and iCal or Mail.

And there are more goodies. You can take screenshots of your iPhone's interface and search your contacts. International support has expanded dramatically—the iPhone now speaks 16 different languages. And if you press and hold on the keyboard's .com key, it will pop up options for the other common top-level domains: .edu, .org, and .net (this also works when the .com button doesn't appear on the keyboard but the @ key does—for instance, when you're addressing e-mails; in that case, you tap and hold the period key to get the options).

A few pieces are missing from this update—most notably the ability to cut, copy, and paste text between different applications. And too few programs support horizontal orientation, a sad omission since many people prefer to type on the wider keyboard it provides.

Macworld's Buying Advice

The iPhone 2.0 software is full of the refinements you'd expect from a second-generation Apple product. The iPhone OS still isn't perfect, and we wish Apple had addressed some lingering shortcomings, but it's a welcome step up for what was already arguably the best mobile platform on the market.

Support for third-party applications and the ease of distribution via the App Store mean that many of those gaps will likely be filled—eventually.

Dan Moren is an associate editor at *Macworld*.

Should I Upgrade My iPod Touch Software?

Yes, it's worth $10. To begin with, the 2.0 software includes all of the applications in the January touch update—Google Maps, Mail, Weather, Web Clips, Stocks, and Notes—for half the price. It supports push e-mail, contacts, and calendars with Microsoft Exchange or MobileMe, searchable contacts, multiple calendars, support for viewing more types of e-mail attachments, the ability to move or delete multiple e-mail messages at once, parental controls, the ability to take a screenshot of the iPod's interface, and much more.

Then there's the App Store. The vast majority of these programs will work splendidly with the iPod touch. And Apple's free Remote application is worth the upgrade price by itself.

Still wondering whether this upgrade is worth the ten bucks? Find me a better bargain on the planet and my money is yours.—**CHRISTOPHER BREEN**

2.0 Software

PROS: Access to third-party applications; robust enterprise support; push synchronization for MobileMe users; bulk e-mail management; better e-mail attachment support; expanded international language support.

CONS: Certain features are still lacking: no built-in support for task management; no support for iCal event invitations; no syncing with Notes app; some instability issues.

PRICE: for iPhone users, free; for iPod touch users, $10

COMPANY: Apple, www.apple.com

PREVIEW

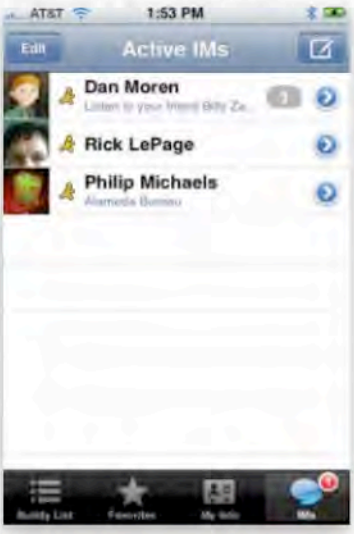
iPHONE APPS

The App Store gives iPhone and iPod touch users access to hundreds of applications

The App Store—accessible via iTunes or from an iPhone or iPod touch running the 2.0 software—kicked open its doors with more than 500 applications. We'll be reviewing scads of them online and in the magazine, but here's a taste of some of the cool software you can now download and install on your iPhone, iPhone 3G, or iPod touch.

AIM

Filling a notable gap in the original iPhone functionality, AOL's free AIM client is pleasantly straightforward: log in with your AIM, .Mac, or MobileMe account information, and you can chat with other such users much faster than via SMS or e-mail. It may not be as robust as desktop sofware, but it's a great addition.—**DAN MOREN**



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NYTimes

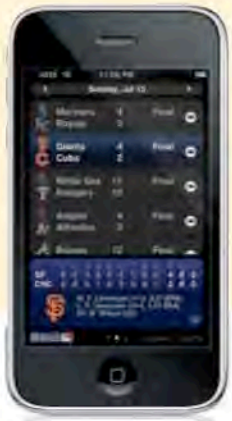
Perhaps the *New York Times* can finally shake off its dated Gray Lady moniker, thanks to the free NYTimes application for the iPhone. This attractive piece of software offers up to seven days of *Times* content. You can read stories in either portrait or landscape mode, and it even offers a search function to help you find stories.—**ROB GRIFFITHS**

Texas Hold'em

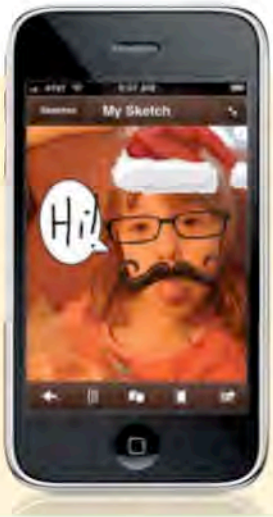
There are already quite a few iPhone poker games (and I expect many more in the coming weeks and months), but Apple's own $5 Texas Hold'em is going to be hard to top. It lets you play the popular poker game against computerized opponents (just like the iPod version of the game) or match up with as many as eight friends over a Wi-Fi network (I see the *Macworld* staff's productivity dropping a bit in the near future). By rotating your iPhone or iPod touch, you can switch between first-person and top-down views. The graphics are stunning (which explains the huge 128MB download size), and little touches like original iMac posters on the walls behind players make it a game worth going "all in" for.—**JONATHAN SEFF**

MLB.com At Bat

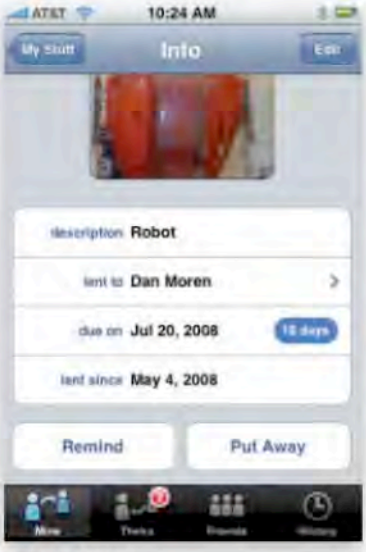
Away from your TV or radio and desperate for news about your favorite baseball team? Major League Baseball's MLB.com At Bat lets you view live baseball scores, including a line score and current game status, and watch video highlights just a few minutes after the events occur—while the game's still going on. The $5 app will work for the rest of the season—we'll have to see what happens with pricing next season. Batter up!—**JASON SNELL**



Sketches

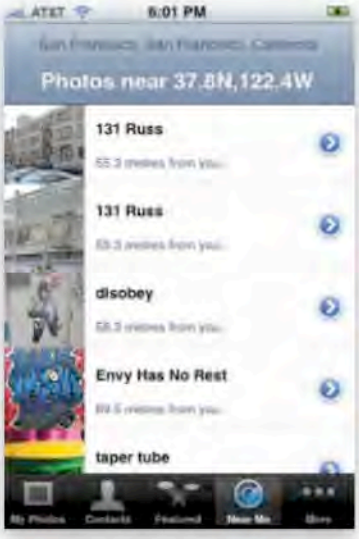


If your pals won't put up with your scrawling big black ink mustaches on their faces, you can settle for the virtual equivalent with LateNiteSoft's $6 Sketches, which lets you draw all over your iPhone, even on pictures that you import from your camera or iPhone photo albums. You can use a variety of different colors and line thicknesses while drawing, insert geometric shapes and clip art, and even add a picture from the Web or a map of your current location (handy for giving directions). When you're done, send your masterpieces to an iPhone photo album or post them online.—**DAN MOREN**



Circulator

Why waste precious brain matter trying to keep track of who has borrowed your stuff when you've got a phone that can handle it for you? That's the concept behind Circulator from TheCoding-Monkeys. The $6 app lists what you've borrowed—books, DVDs, even money—and what you've lent out, including the day the loan started and the due date of the item in question. You can even send SMS or e-mail reminders to your friends.—**JASON SNELL**



Exposure

Looking for an easy way to show off your Flickr photos? How about explore the latest snapshots from your friends and the larger Flickr community? Then Connected Flow's Exposure (ad-supported version, free; Premium version, $10) belongs on your iPhone or iPod touch. The main page displays your personal photos as a list, while buttons along the bottom of the screen let you explore photos from your contacts or from the Flickr community. But perhaps the most intriguing option is the Near Me feature. Tap on this button and Exposure will use your current location to find images tagged with nearby longitude and latitude coordinates—in my case, an image of the graffiti-strewn garage door across the street from my home (and many more).—**KELLY TURNER**

OmniFocus

You've got a task manager on your Mac for staying on top of various to-dos. But when you're out and about, how are you supposed to keep up with your tasks—or add new ones? The Omni Group thinks it has solved that problem with OmniFocus for the iPhone, a $20 mobile version of its task manager based on the principles of David Allen's Getting Things Done (GTD). OmniFocus lets you add, organize, and mark off to-dos on your phone; its ability to sync wirelessly with any WebDAV server keeps the desktop and iPhone versions of OmniFocus up-to-date. More impressively, it taps into the iPhone's ability to pinpoint your location, letting you create lists based on what's nearby (say, finding appropriate stores for your errands).—**JIM DALRYMPLE**

PCalc

TLA Systems' $10 PCalc for iPhone transforms your iPhone or iPod touch into the coolest scientific calculator ever. In vertical orientation, it looks like an attractive standard calculator, albeit one with conversions, constants, and more. Turn your device horizontally, though, and PCalc becomes a powerful scientific calculator, complete with RPN (Reverse Polish Notation) mode; hex, octal, and binary modes; and a simulated paper tape.—**JASON SNELL**

Band

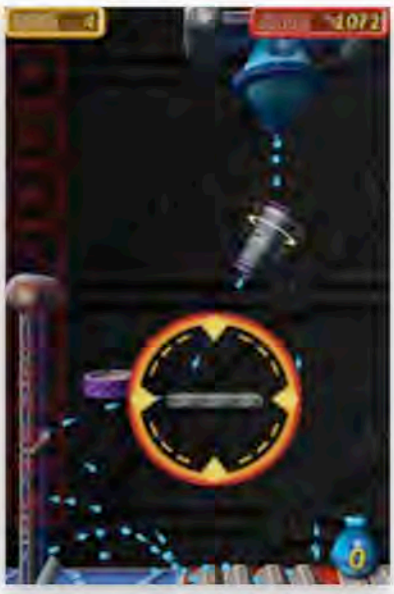
Demoed to enthusiastic applause at this year's WWDC, MooCowMusic's $10 Band is a collection of virtual instruments that let you "play" music via the iPhone's touch screen, including a rock drum kit with on-screen pads, Funky Drummer, a bass guitar, a piano, and a 12-bar blues electric guitar. You can record, overdub, and mix together all of the instruments in Band to create a final track. The application includes audience cheers to make you feel like a real rock star, and provides visual feedback—for example, when you pluck one of the bass strings, it vibrates on screen.—**JIM DALRYMPLE**

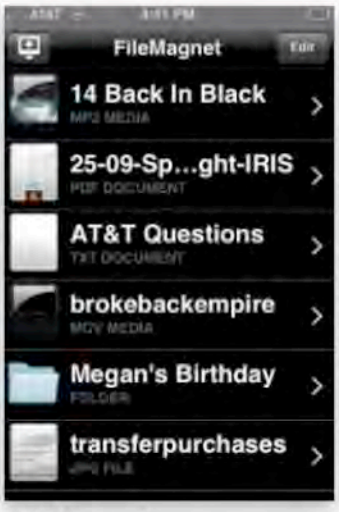
Remote

It's no surprise that Apple's Remote application headed up the App Store's list of Top Free Apps immediately after its launch. It turns the touch screen on your iPhone or iPod touch into the best remote control I've yet seen for controlling an Apple TV or an iTunes library on your local Wi-Fi network. Using an interface that mirrors your iPhone's own iPod application, Remote gives you access to all your media and playlists, and it adds a nifty search feature: tap in a few letters and you instantly get a list of all content—artist names, tracks, movies, and so on—containing the search phrase. While Remote works well with iTunes, it's a godsend for Apple TV users.—**DAN FRAKES**

Enigmo

Not many applications win awards *before* they come out, but Enigmo from Pangea Software can make that claim. The iPhone version of the classic Mac game took home an Apple Design Award at this past June's WWDC, and when you see its gorgeous graphics on the iPhone's screen, you'll understand why. The $10 3-D puzzle game requires that you direct a flow of liquid from point A to point B through a series of bumpers, sliders, and other objects and obstacles as you try to complete each of the 50 levels. Enigmo makes the most of the iPhone's Multi-Touch interface.—**PHILIP MICHAELS**



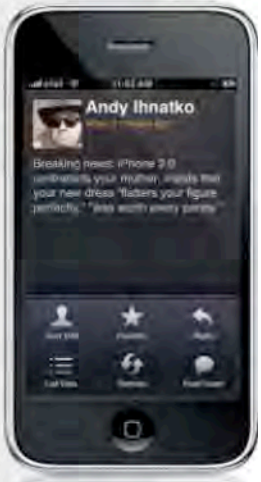


FileMagnet

The iPhone excels at media playback and portable communication, but it's not very good as a file storage device. Magnetism Studio's $5 FileMagnet is a clever solution that lets you load files onto your phone or iPod touch and view them there, all without having to resort to e-mail workarounds or physical connections between your phone and computer. All you need is a Wi-Fi network that both your Mac and your iPhone can log on to. Launch the software on your iPhone, connect to the uploader client on your Mac, and start transferring files. FileMagnet currently supports a number of common formats for documents, images, audio, and movies, and more are on the way.—**DAN MOREN**

Twitterrific

The iPhone version of The Iconfactory's client for the Twitter messaging service, Twitterrific, lets you post and read *tweets*—short messages like miniature blog entries—from anywhere. The program integrates with twitpic.com, so you can upload a photo with the URL embedded in your tweet. An integrated Web browser lets you tap on user names or hyperlinks and view the contents without leaving the program. It's available in two versions: a free one that periodically displays ads, and a $10 Twitterrific Premium.
—**JASON SNELL**



WireTap Studio

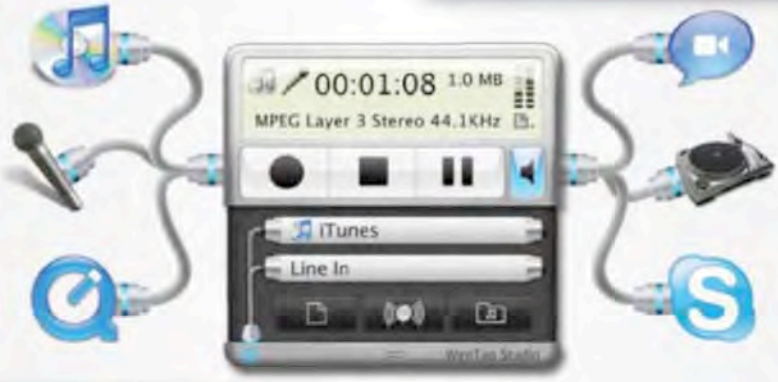
Record. Edit. Play.

"If you're in the market for a tool for capturing audio and moderately editing the results, look no further than WireTap Studio."

– Christopher Breen, Macworld

"WireTap Studio is dead simple to use: select an audio source, record, do any editing and post-production that needs to be done, and then save the file one of a variety of formats."

– Jason Tucker, Blogger & Podcaster Magazine



"The design and feature suite for WTS seem to say "Give me a chance to make it easier to get this right," and that's a big plus in any field of endeavor -- it's a shame they dont make marriage counseling software."

– Michael Rose, The Unofficial Apple Weblog (TUAW)

"WireTap Studio is a fantastic tool for audio capture, arguably the best available for the Mac..."

– Kirk Hiner, Applelinks.com

It's creating quite a buzz.

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Macworld Editors' Choice ★★★★★

The Mac Observer Editors Choice Award 2008

Audio Units · Mac · Universal · Works with .mac · WireTap Studio – I'd Tap That!

Macworld 4½ winner macworld eddys

WireTap Studio requires a Mac with an Intel, PowerPC G5, or PowerPC G4 (1GHz or faster) processor and Mac OS X 10.4 or later.
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5 Tips for Better Browsing

Surf the Web faster and more efficiently **BY JOE KISSELL**

Whether you're trying to keep track of a zillion tabs, navigate your bookmarks, or deal with a page that just won't load, the more you use your Web browser, the more likely you are to run into problems. But with the help of hidden features and third-party add-ons, you can tackle these troubles and squeeze even more efficiency out of Apple's Safari 3 (★★★★½; macworld.com/3611) and Mozilla's Firefox 2 (★★★★; macworld.com/3406) and 3.

1 Keep Tabs on Your Tabs

Safari's and Firefox's tabbed browsing features let you open multiple sites within a single window, thereby reducing screen clutter. But some aspects of tabbed browsing are less obvious.

Open Tabs in the Background Say you've just performed a Google search. You now have a results page, which probably includes tons of links you'd like to visit. You could simply click on a link to view that page in the current window, and then click on the Back button or the SnapBack icon in the Search field to return to the results. But an easier way is to ⌘-click on each link (in Safari or Firefox), which opens pages in new background tabs. You can continue navigating your search results in the foreground. (If the shortcut doesn't work in Safari, go to Safari: Preferences, click on Tabs, and select ⌘-Click Opens A Link In A New Tab.)

Restore Tabs Automatically After hours of browsing, you often end up with several open windows, each with

its own set of carefully culled tabs. Murphy's Law dictates that this is the moment your browser will crash. But you don't need to find all those pages again manually. In Firefox, choose Firefox: Preferences and click on Main; from the When Firefox Starts pop-up menu, choose Show My Windows And Tabs From Last Time. From now on, Firefox will keep track of all open tabs and windows, and restore them automatically when the browser restarts. (When restarting Firefox after a crash, click on the Restore Session button.)

Although Safari doesn't have an auto-restore feature, you can manually regain sites by selecting History: Reopen All Windows From Last Session. To restore sessions automatically, try Hetima Computer's free SafariStand 3 (macworld.com/0098). Once you've installed it, choose Stand: SafariStand Setting. Under General, from the Restore Method At Launch pop-up menu, select Automatically Reopen Last Session (Safari). Note that the software uses an unofficial method to alter Safari's behavior. It could stop working after an update to Safari or OS X.

2 Find Previously Viewed Pages

How many times have you read something on the Web and later had no idea where to find that information again? Although browsers keep track of your *history*—a list of URLs you've visited recently—this doesn't offer much help if you don't know the name of the site or if the page is no longer in the history list. There are several ways to solve this problem.

Use a Search Tool If you're running Mac OS X 10.5 (Leopard), you can easily search the contents of pages you've visited. That's because Spotlight indexes everything you look at in Safari, except when you've enabled private browsing (Safari: Private Browsing). Click on the Spotlight icon in the menu bar and enter your search term, and Spotlight will display a list of matches under Webpages. But there's a catch: even though Spotlight knows the text that was on the page, it can't display that text if the page no longer exists. For that, you'll need a more powerful tool, such as St. Clair Software's $20 History-Hound 1.9.2 (macworld.com/3674).

ILLUSTRATION BY COREY PIERCE

If you haven't upgraded to Leopard, or you don't use Safari, check out Google's free Google Desktop (★★★½; macworld.com/2748). Like Spotlight, Google Desktop indexes the contents of pages you visit; also like Spotlight, it doesn't store pages, so you must go back to the original site once you've discovered a match. But unlike Spotlight, Google Desktop supports numerous browsers (including Firefox), and can even index messages from your Gmail account, not to mention other files on your hard disk.

Clip Your Content Although you can't beat the convenience of programs that automatically save and index your Web pages, they can quickly overwhelm you with irrelevant information. For better control, consider a program like Bare Bones Software's $39 Yojimbo 1.5 (★★★★; macworld.com/1186) or Devon Technologies' $40 DevonThink 2 (www.devon-technologies.com). Both let you manually clip and store Web pages—or portions of pages—in searchable databases.

An even more promising option is Evernote Corporation's free Evernote (www.evernote.com), a service that lets you clip information such as Web pages, text snippets, and images, and access it through software on your Mac, a Web browser, or a mobile device such as an iPhone. The service indexes all of the text in your clippings (even text that appears in photographs), so you can easily search for content from any device. Shortly before press time, the service had just announced its grand opening after several months of private beta testing.

3 Keep Bookmarks in Sync

If you have multiple bookmark lists strewn across different browsers—or even across several machines—it's time to rein in the chaos.

Sync Your Bookmarks If you use several browsers, each with its own set of bookmarks, try merging them with Sheep Systems' $20 Bookdog 5.1 (macworld.com/3677). The software can display, edit, verify, and sort bookmarks from multiple browsers, as well as copy or merge bookmarks between two different browsers (see "Many Browsers, One Set of Bookmarks"). It can also sync with Google Bookmarks (macworld.com/3678), so you can use those bookmarks online.

Make Bookmarks Universal If you prefer to access bookmarks from one place, consider a bookmark manager. Alco Blom's $25 URL Manager Pro 3.5 (★★★★½; macworld.com/3679) stores bookmarks in its own database, providing a systemwide menu that allows you to select them from most browsers. Agile Web Solutions' free AllBookmarks 3 (allbrowserbookmarks.com) displays a menu-bar item containing all of your bookmarks from Safari and Firefox, as well as from the free Flock 1.0.3 browser (★★★★½; macworld.com/3381), the Camino Project's free Camino 1.5.5 (★★★★; macworld.com/3401), and the Omni Group's $15 OmniWeb 5.6 (★★★★½; macworld.com/3402). Selecting a bookmark opens that page in your default Web browser.

Safari-to-Firefox Update.bdogmigr
Safari
Firefox 3
Select which browser's items to favor where
consolidating folders
avoiding duplicate bookmarks
Bilaterally, SYNCHRONIZE missing bookmarks between Safari and Firefox 3
Unilaterally, copy FROM Safari TO Firefox 3 only.
Add parent folder names from Safari as Tags in Firefox 3
Create folders in Safari from Tags in Firefox 3
For bookmarks with multiple tags...
Create multiple copies, one for each tag.
Create only one copy, using one tag.
Do It!

Many Browsers, One Set of Bookmarks Bookdog offers numerous options for synchronizing bookmarks between different browsers.

Quick Safari Searches With the help of Inquisitor, matches appear immediately when you type a few letters into Safari's search field.

Sync Online In the past, you were able to use .Mac to sync Safari bookmarks between multiple Macs. But as we go to press, Apple is transitioning from .Mac to MobileMe. We haven't yet tested how bookmark syncing will work on MobileMe.

Firefox users can download the Foxmarks Bookmark Synchronizer add-on (macworld.com/3377), which provides online syncing capabilities—even across platforms.

4 Use Predictive Searching

In Firefox 2 or Safari, when you begin typing a URL into the location bar, the browser shows any matching URLs from your bookmark list or browsing history. This lets you navigate to one of the suggested links with the keyboard or mouse.

Firefox 3 takes this autocompletion feature to a new level. It recognizes not only portions of URLs, but also words from the titles of Web pages and tags that you've added to your bookmarks. (To

append tags to bookmarks, choose Bookmarks: Bookmark This Page, or double-click on the blue star at the right side of the location bar. Enter keywords in the Tags field.) You can also type search terms directly into the location bar. Firefox performs a Google search and either brings up a results page or takes you straight to the top Web page when it finds a clear match.

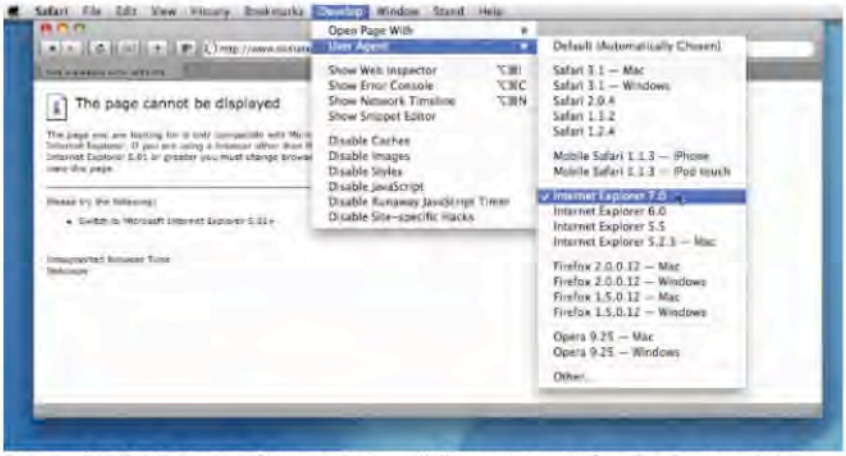
Although Safari lacks these sophisticated autocompletion features, you can enhance its search field using David Watanabe's free Inquisitor 3 add-on (macworld.com/3681). Inquisitor provides intelligent autocompletion—for example, type **macw** and it suggests *macworld* as a match. Enter **lord of** and Inquisitor suggests, among other matches, *lord of the rings online*. Inquisitor also displays pages that would appear in a search for those terms (see "Quick Safari Searches"). Type **diskw**, for instance, and you'll see a list of sites about Alsoft's DiskWarrior utility. Use the arrow keys to jump directly to the result you want—all without having to display a page of Google search results.

5 Improve Site Support

Once in a while, you might encounter a site that refuses to display properly or that generates an error message telling you your browser's not supported. However, you can sometimes outsmart such sites by switching the user agent setting, a trick that lets one browser masquerade as another. For instance, a site that doesn't work in Safari might work if you change the setting to Firefox.

In Safari 3.1.1, you must first enable the normally hidden Develop menu. Choose Safari: Preferences, click on Advanced, and select the Show Develop Menu In Menu Bar option. If you encounter an unsupported site, select Develop: User Agent, and choose one of the browsers listed (see "Pose as Another Browser"). Then, in the same tab, reenter the URL you originally tried to visit. If you use Firefox, download the free User Agent Switcher add-on (macworld.com/3378). This appends the User Agent Switcher submenu to the Tools menu; from here you can select a different browser.

Unfortunately, this trick doesn't always work, since some sites rely on features built into Windows, such as ActiveX controls or a PC-only plug-in. The only way to view these sites is by running Windows through Boot Camp or in a virtualization program such as Parallels' $80 Parallels Desktop 3 for Mac (★★★★; macworld.com/2930) or VMware's $80 VMware Fusion 1.1.2 (★★★★; macworld.com/3116).



Pose as Another Browser If browser incompatibility prevents a site from loading, try switching the user agent setting.

Joe Kissell is the senior editor of TidBits (www.tidbits.com) and the author of numerous e-books about Mac OS X (www.takecontrolbooks.com).

TRY THIS

Get Selective about Recent Items

Mac OS X gives you a convenient way to return quickly to programs and files you've recently used. Just choose Recent Items from the Apple menu. If this list starts to look cluttered, you can choose the Clear Menu option at the bottom. But what if you want to *selectively* remove items that you won't use again—software installers, for example? In that case, edit the com.apple.recentitems.plist file.

First, download a copy of Night Productions' free Pref Setter (macworld.com/3682). As its name implies, this utility is intended for mucking around with OS X's preference files. Launch Pref Setter and, in its Search field, enter **recentitems**. The one entry that will appear is the one you want—com.apple.recentitems.plist. Double-click on the file to open it in the editor.

In the editor, you'll see entries for Applications, Documents, Hosts, and Servers (among other things). If you know the name of the item you'd like to delete, enter it in the Search field. For example, if you want to remove the Example.doc file, just enter **Example** in the search field. Any entries that don't contain the word you entered will disappear from the list; in this example, only the Documents entry will remain.

Click on the triangle next to Documents, and you'll see a CustomListItems entry. Click on the triangle next to that, and an Item entry appears. You can click on the triangle beside it to confirm that the name of this item is Example.doc. Thus assured, simply select the Item entry (Item 1, for example), click on Pref Setter's Delete button, and press ⌘-S to save your changes. When you log out and back in, the recent items you deleted will be gone.—CHRISTOPHER BREEN

ICON BY PAUL HOWALT

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Record Any Sounds

Capture streaming radio, Internet phone calls, and DVD audio

BY KIRK MCELHEARN

Many fleeting sounds that play on your Mac are worth preserving. Content streaming over the Internet—be it Internet radio, online videos, an iChat phone call, or even the audio coming from a concert DVD you're watching—can have lasting value, but such content is not always easy to capture. Maybe you're making a podcast and would like to include a Skype interview (recorded with permission, of course), or you want to take content from your favorite streaming radio station to carry with you on your iPod. With the help of the right software, you can record and edit audio files and add them to iTunes for future use.

Fission You can trim, fade, split, and normalize recordings in Fission to make them sound better.

Capture Bits and Bytes

First, you'll need software to record audio. Two excellent Mac programs can do this: Rogue Amoeba Software's $32 Audio Hijack Pro 2.8.1 (www.rogueamoeba.com) and Ambrosia Software's $69 WireTap Studio 1.0.6 (version 1.0.1, ★★★★½; macworld.com/3236). Both allow you to capture audio coming from any program—while excluding sound from other applications or from the system—and save it in the format you want. WireTap Studio costs more than twice as much as Audio Hijack Pro, but it comes with powerful audio-editing tools; Audio Hijack Pro requires a separate editing tool, such as Rogue Amoeba Software's Fission (discussed later).

When recording any online audio, you should consider copyright restrictions. While recording and saving audio such as that from radio programs may be legal according to the U.S. Copyright Act's "fair use" doctrine, you may not have the right to save—and especially to share with others—certain recordings, such as a single from a band's Web site, for example.

Audio Hijack Pro and WireTap Studio work in similar ways. You choose a source (a specific application, or an audio device such as a microphone) and a format (anything from low-bit-rate MP3 to uncompressed AIFF or WAV). To save drive space, don't record at a higher quality level than the original; in most cases, streaming audio doesn't exceed 128 Kbps, so you needn't record larger files (unless you're recording music from a DVD).

The two programs work a bit differently when you initiate a recording, though. WireTap Studio simply has a Record button. With Audio Hijack Pro, you click on a Hijack button and then tell the software to begin recording. (To use this method with Audio Hijack Pro, however, you must install a helper tool; otherwise, you'll need to quit and relaunch the source application when you "hijack" a recording from it.) Both programs let you choose when to start a new file—after so many minutes, hours, megabytes, or gigabytes—and let you set the length of the recording time, though these options are easier to set up with Audio Hijack Pro. WireTap Studio offers both quick recording (where you start and stop manually) and a Recording Sessions window (where you can preset a schedule, and even have your Mac wake up to record something).

When recording with either of these programs, you can select a single application from which to record. You can record audio from, say, Safari, iTunes, or even DVD Player (if you want to record music from a DVD you own) while you keep working on your Mac. However, bear in mind that both programs record *all* audio from the selected application. So if you are recording a stream from a Web site, audio from other Web sites you browse to will be recorded as well. A helpful tip: if you're planning on recording something long from a Web

site, use two different browsers (for example, use Firefox for recording and Safari for browsing other sites during the recording session).

Once you've finished recording, you need to decide what to do with your audio file. Audio Hijack Pro stashes files in a location you select and keeps pointers to those files in the program's Recording Bin, a kind of library; it can also add files automatically to iTunes or an iPod. WireTap Studio displays recordings in a Library window (the actual files are stored in a WireTap Studio Library file in your Documents folder). You can click on preset buttons to export files to many locations: a local folder, a network server, an iDisk, an iPod, iTunes, and more.

All About Radio

Thousands of radio stations from around the world stream content over the Internet, providing millions of hours of programming each year. You now know how to capture and record any streaming media; but if you regularly listen to Internet radio, you may want to look at solutions designed for scheduled recording. Ideally, you want not only to record, but to record at the right time to catch your favorite programs.

Do you want to capture your favorite team's game on the radio? Or make sure you don't miss an interview with a band you like? Or record a live concert from a classical music station? Rogue Amoeba's $32 Radioshift lets you find the stations you want and then listen to them with a single click. The program's radio guide lists some 50,000 radio stations by genre and location; you can save your favorites for quick access. (That's about 25 times as many stations as iTunes offers; and while most of iTunes' stations are online only, Radioshift includes thousands of AM and FM stations that also stream on the Web.)

You can also record these radio stations by subscribing to them, and then setting dates, times, and durations for your recordings. Radioshift keeps a library of recordings that you can listen to when you want to, edit (with an additional tool), or export to iTunes to transfer to your iPod. Radioshift can even wake up or turn on your Mac to record your subscriptions. You can set up schedules for as many programs and stations as you want; as long as you don't try to record from two stations at the same time, everything should go smoothly.

If you're planning on recording something long from a Web site, it's best to use two different browsers to avoid problems.

Edit Your Recordings

While you can use these recordings as they are, it's much more useful to be able to edit them, especially if you want to keep some of them. For instance, you might want to crop your files to remove excess audio, split them into multiple files, or export them to a different format. WireTap Studio includes a powerful editing tool, and Rogue Amoeba also sells the $32 Fission, though a bundle of Fission and Audio Hijack Pro is only $50. Both of these tools offer comprehensive editing features, and make simple editing a task that anyone can do. (The open-source Audacity [audacity.sourceforge.net] is a free option, but it's a bit more complex.)

Editing with these tools is visual; opening a file reveals the content as a waveform. In some cases, you can spot places where programs begin and end by noting a bit of silence at those points in the waveform. Otherwise, you'll need to spend a little longer figuring it out. You can play back the audio in Fission, Audacity, or WireTap Studio's editing tool, and then choose an area to trim, crop, or split. All three programs let you save the edited files in their current format, or export them to a variety of formats. Because Audacity has to uncompress an entire program for you to work on it—something that can take a few minutes and may lead to a deterioration of sound quality—WireTap Studio and Fission are easier to use, as they work with many audio formats natively, including AAC, MP3, AIFF, and WAV.

Organize Files

As with any files you add to iTunes, you must tag them properly to find them in the future. Start by adding a name, an artist, and perhaps an album name (which for radio shows could be the name of the program), and then add any other tags that will help you sort these files. To understand some of the more complex tags, read "iTunes Tags Demystified" (macworld.com/3501). Files you record in formats that iTunes accepts—such as AAC or MP3—will work fine in iTunes and on your iPod, so you can listen to those recordings anywhere.

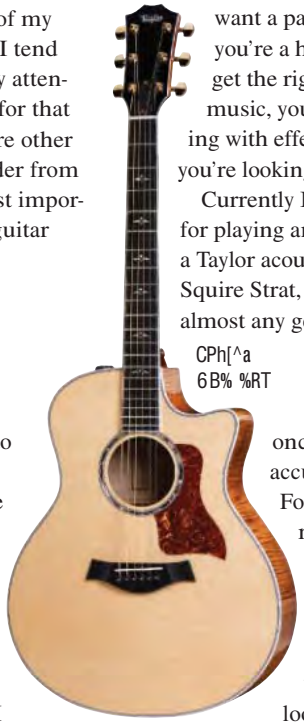
WireTap Studio It's easy to capture and keep track of recordings with WireTap Studio's floating recording controller and library.

Kirk McElhearn writes about Macs, iPods, books, music, and more on his blog, Kirkville (www.mcelhearn.com).

2W^^bT cWT AXVWc 6dXcPa

CWT aXVWcX]bcad\T]c\PZTbU^aQTccTa<PRaTR^aSX]Vb 1H9%<30;AH<?;4

Because I record all of my music on the Mac, I tend to focus most of my attention on software designed for that purpose. However, there are other important factors to consider from the outset—one of the most important is choosing the right guitar for the job.



CPh[^a 6B% %RT

FWPcc^;^^Z5^a

You can get away with a lot playing live, but when it comes to recording, you're looking for a tone as close to perfect as you can get. Like most guitar players, I fiddle around with my tone endlessly, always trying to get that perfect sound. I do use some effects—not as a way to shape the sound that I want, but as a way to enhance the sound I already have. That's where choosing the right guitar comes into play.

Far too often, I see guitar players load effects onto their guitars in an attempt to boost the signal, but instead they end up muddying the tone. Again, in a live situation that may work, but it's a disaster when trying to record.

Approach your buying experience knowing what you want to do with your instrument. Do you want to record? Play live? Just have fun and play many different styles of music? Your decision will have an impact on what type of guitar you end up buying. For example, if you're a blues player, a high-gain, active pickup, heavy-metal–focused guitar probably won't be the best choice for your type of music. Likewise, you won't want a passive pickup jazz guitar if you're a heavy-metal player. If you get the right guitar for your type of music, you'll rely less on experimenting with effects to get the killer tone you're looking for.

Currently I have 11 guitars that I use for playing and recording music. From a Taylor acoustic to a 23-year-old Fender Squire Strat, I can get the right tone for almost any genre I want to play.

Of course, you're not going to go out and buy that many guitars all at once—my collection has accumulated over 20 years. For example, when I started recording a new album this past year, I picked up three new guitars—each selected for the specific tone it brought to the songs. Here's a look at what each offers the recordings.

CPh[^a6B% %RT

There are so many choices when you're looking for an acoustic guitar. I chose Taylor's $3,948 GS6|6ce acoustic/electric cutaway model (f f f cPh[^aVdXcPabR^\). Made from big-leaf maple and Sitka spruce, it's such an unbelievably great-sounding guitar that just playing it will inspire you to write songs.

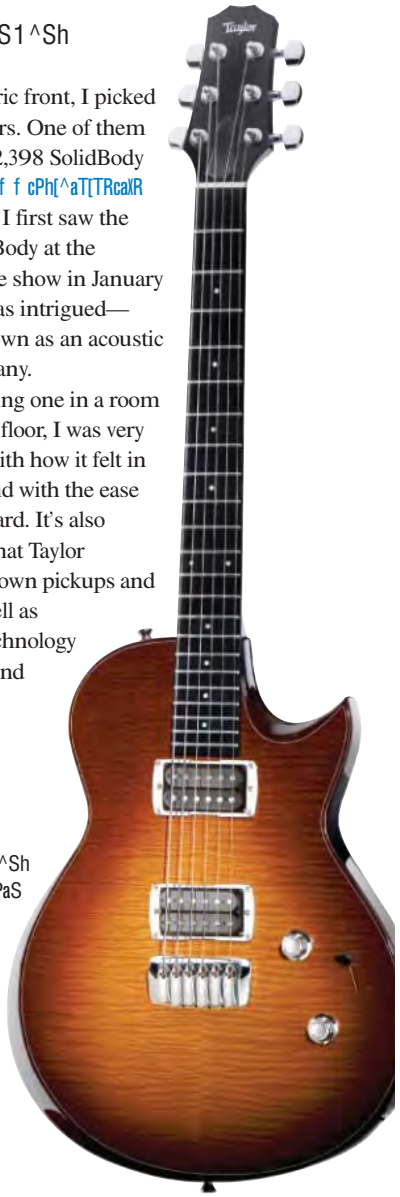
I like cutaway models for playing the lower frets during an acoustic solo. I also decided to go with the combined acoustic/electric because I would be using it to play live in addition to recording with it.

I've tried recording with the 6|6 plugged directly into my Mac audio interface and with a microphone—both produced great results. I've written two acoustic songs for the album so far, and I'm very pleased with the results.

CPh[^aB^[XS1^Sh BcP]SPaS

On the electric front, I picked up two guitars. One of them is Taylor's $2,398 SolidBody Standard (f f f cPh[^aT[TRcaXRVdXcPabR^\). I first saw the Taylor SolidBody at the NAMM trade show in January 2008 and was intrigued—Taylor is known as an acoustic guitar company.

After playing one in a room off the show floor, I was very impressed with how it felt in my hands and with the ease of the fretboard. It's also impressive that Taylor designed its own pickups and bridge, as well as including technology in the neck and



CPh[^a B^[XS1^Sh BcP]SPaS

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CHECK IT OUT

Vox AmPlugs

Vox AmPlug AC30

Plugging in your guitar and cranking up the amp isn't always an option—you might be an apartment dweller who has respect for your neighbors, or a parent with kids who are fast asleep. Vox has come up with a solution with its three amPlugs models (www.voxamps.co.uk; available online for $40 each)—AC30, Classic Rock, and Metal.

Each model has a different sound, but all three operate in the same way. The amPlug connects directly to your guitar's 1/4-inch output. You then connect a set of headphones to the device's headphone port, turn up the volume, and start playing. There are three controls on the amPlug—Volume, Tone, and Gain—that let you control the overall sound of the guitar.

One of the great features of the amPlug is that it has an auxiliary port so you can plug in an iPod and play along with your favorite songs. The controls on the amPlug do not affect the music coming from the iPod, so you can easily set the volume of both devices to hear more guitar or more music, whichever suits your tastes.

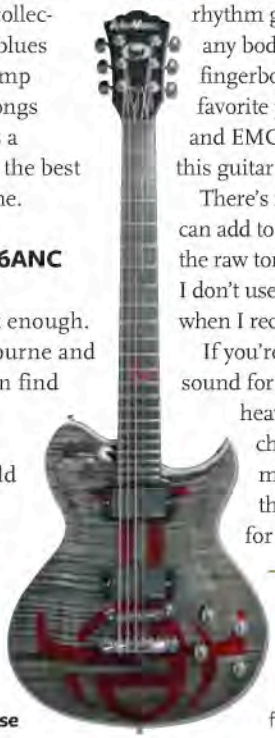
I was pleasantly surprised at how good the sound was coming from the amPlugs. For such a small device, Vox did a great job of replicating the tones the amPlugs are meant to emulate. And with 15 hours of power provided by two AAA batteries, you can rock out quietly until the break of dawn.

body that the company has developed through years of guitar making.

The Taylor SolidBody is one of the most versatile guitars in my collection, producing a very warm blues tone through my Vox AC30 amp and a chunky tone for rock songs through my Randall amp. It's a versatile guitar that gives you the best of both worlds in terms of tone.

Washburn Signature WI66ANC Nick Catanese

Sometimes chunky just isn't enough. I'm a huge fan of Ozzy Osbourne and Black Label Society, so I often find myself writing and playing songs that require a lot of gain. As I said earlier, I would rather achieve the tone I'm looking for by choosing the right guitar instead of by adding overdrive or other effects.


Washburn Signature WI66ANC Nick Catanese

The $1,749 Washburn Signature WI66ANC Nick Catanese (www.washburn.com)—named after Black Label Society's rhythm guitarist—has a solid mahogany body and neck with an ebony fingerboard. It also comes with my favorite pickups, the EMG 81 (neck) and EMG 85 (bridge). The tone from this guitar is simply killer.

There's no amount of effects that I can add to my other guitars to create the raw tone I get from this one. In fact, I don't use any external effects at all when I record with it.

If you're looking to get a high-gain sound for pinch harmonics or a classic heavy-metal tone, you must check out this guitar—it's now my go-to guitar for recording this type of music as well as for playing it live.

Editor at Large **Jim Dalrymple** is recording his first album on a Mac—visit our Creative Notes blog (macworld.com/3623) to follow his progress.

ICON BY PAUL HOWALT

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Make Captivating Charts and Graphs

Simple ways to create engaging graphics that tell a story **BY TERRI STONE**

If you've ever sat through a PowerPoint presentation or read a quarterly report, you've probably been bored by a chart or graph. Chances are, it was blue, red, and yellow on a gray, lined background. Maybe someone even threw in a 3-D effect to make it "pop." You may even be guilty of creating a few of these lackluster graphics yourself.

Most people could stand to improve their informational graphic, or *infographic*, design skills. An infographic is a combination of words, numbers, and pictures that tells a story quickly and clearly—pie charts, bar charts, and line graphs are all examples. And despite the word *graphics*, you don't need specialized programs, an art degree, or the fancy effects in office software to produce engaging infographics. Instead, follow these few design rules from top experts to produce effective infographics no matter which application you choose to work in.

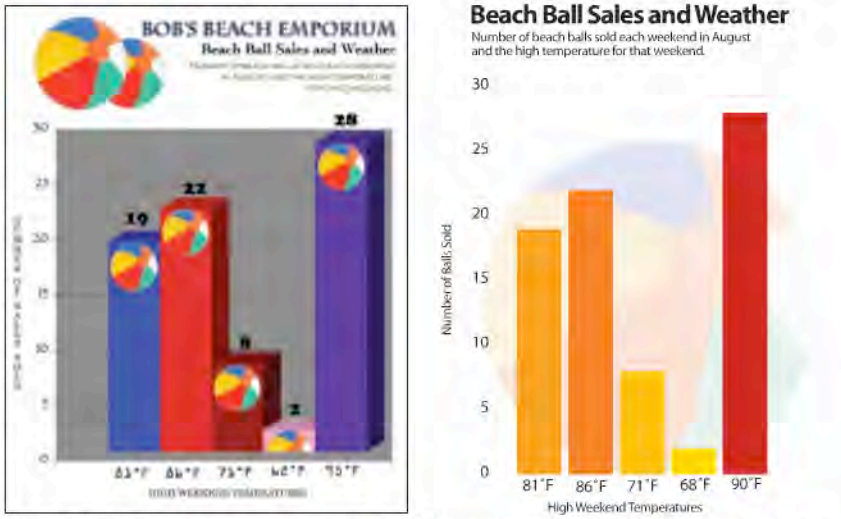

Chart School The beach ball sales chart on the left is overwhelmed by too many fonts and text sizes, an overuse of graphics, distracting 3-D effects, poor color choices, and a cluttered background. The chart on the right fixes those flaws to make the information easier to understand. The sole font is sans serif (Myriad) and is used in only three sizes. The most important information appears at the top left of the chart. The bar colors are different shades of warm oranges and reds that get more intense as the temperature gets higher. Finally, the background is free of lines, and the chart isn't boxed in with a frame.

Understand the Information

The best charts and graphs tell stories of growth, reduction, contrast, time, or value in a straightforward, concise way. According to Michael Murphy, the creative director of *Inbound Logistics* magazine, the designer's job when creating an infographic is to figure out the main narrative and find the information's hidden drama.

To do that, you first have to understand the data's implications. Then you have to look at the data through the eyes of your target audience. Ask yourself, are you giving them the most important facts? And are you speaking their language? Avoid jargon unless you're sure the terms mean the same thing to everyone in your audience.

Choose the Right Delivery Method

One of the most important decisions you'll make when creating an infographic is the type of chart or graph to use. In general, bar charts are best for comparing amounts or showing trends over time. Diagrams or flowcharts are better when you're illustrating processes or relationships.

Next, let the numbers help you choose the type of infographic that's most appropriate. For example, use a bar chart only when the numbers you're comparing are dissimilar—a row of roughly equal bars doesn't make much of an impression. Use pie charts only when percentages equal 100 percent.

Then sketch something out on paper to ensure that your ideas, not the software, will guide your infographic. Karl Gude, the head of Michigan State University's infographics program, suggests that you not think about the structure in terms of what looks pretty, but rather think about what's logical.

Only after you've refined your paper sketches should you play around with the chart and graph templates in programs such as Adobe Illustrator (●●●●½; macworld.com/2760), Apple Numbers (●●●½; macworld.com/3042), Microsoft Excel (●●●; macworld.com/3347), or Red Rock Software's Delta-Graph (●●●●; macworld.com/3729).

Emphasize What's Important

Four things can help you highlight your infographic's most important data and convey information quickly: layout, size, font, and color.

Layout Because most people look first at a page's top left, that's a natural place to set the stage for the rest of your chart or graph, with a headline or introductory text. It may also be a good location for an important image you want viewers to notice before other elements. As you might expect, the lower right-hand corner is a bad spot for must-see details.

Successful infographics tend to be wider than they are tall, but don't force information into a horizontal form if it's easier to understand in another shape.

Size In general, the least important information should be the smallest, but don't use too many text sizes, or your viewers will get confused. For example, you could stick to three text sizes: the headline would be the largest; any introductory text, a little smaller; and the chart text, the smallest.

Font Limit yourself to one or two type families to keep text easy to read. Sans serif typefaces (those without detail at the ends of strokes) are good for most infographics, because they tend to have larger, cleaner lines than serif fonts. Helvetica, Gill Sans, and Trebuchet MS are sans serif fonts that ship with OS X. Other choices are Franklin Gothic, Myriad, and Stone Sans.

Many of these font families contain variations; so, for example, you can use Myriad for your text and then use Myriad Bold to add oomph to a headline.

Color Color can do wonders to help important information stand out—but only if it's used sparingly. For example, to make sure she's using color in the most effective way, Heather Jones, the deputy art director at *Best Life* magazine, starts in black and white. Once she's sure her data is clearly communicated, she then adds color in moderation to further differentiate parts of the infographic.

Avoid bold primary colors, as they can make it difficult to create emphasis with color. (Also, keep color-blind viewers in mind; many can't distinguish between green and red.) Try adopting a relatively muted palette (such as earthy greens and yellows) or pick one color and use darker and lighter tints of it.

You should also consider all the ways that the chart or graph may be distributed. If there's a chance that, say, it will be printed on black-and-white printers, you're safer using only black, white, and shades of gray.

Common Mistakes to Avoid

Once you have a solid draft of your infographic, step back and eye it critically. Your goal is to determine whether you've made any of the following mistakes:

No Focal Point If bars, pie slices, or lines in your graphic are similar sizes and colors, then there's nothing to catch the viewer's eye. Say you're showing that more beach balls are sold on hot days, and the bar for each day in your graphic is gray. Change the bar representing the hottest day to red, and it instantly becomes the focal point.

Inconsistency Similar elements should look the same, in color, size, placement, and typeface. If the infographic's visual cues are inconsistent, you risk confusing viewers.

Likewise, charts that are on the same page and use the same scale should be the same size. For instance, if you're creating a chart that relates high temperatures to sales of sunblock, and it'll appear on the same page as the beach-ball chart, the sizes of the overall charts and the elements within them should be consistent. That way, viewers can easily compare the information.

Too Much Stuff Get rid of any nonessential information that competes with critical information. For example, you may be using a grid to plot the heights of bars in a chart, but that doesn't mean you need to show each grid line. And if that chart is showing growth over time, emphasize the starting point and finishing point by removing the numbers above each in-between bar. Editing out chart junk like this strengthens your message.

Borders Many people have an almost overwhelming urge to box in their data. Fight it, especially if your infographic also has details like axis lines, tick marks, grid lines, and text.

Empty Effects Have you noticed that these rules for effective infographic design do not encourage you to use 3-D effects, elaborate shading, reflections, or textures? That's because you want people to focus on the information, not on meaningless bells and whistles.

An infographic has to work on a flat level first. Although dimensional graphics, perspective distortions, and fancy effects are popular now, they're usually just chart junk. If you must use them, do so sparingly.

FIGURES 1 AND 2 COURTESY OF INBOUND LOGISTICS MAGAZINE

Keep Infographics Simple In this pair of charts, Michael Murphy kept his color and graphics choices simple, and avoided boxing information to ensure the numbers wouldn't get lost in the clutter.

Terri Stone is the editor in chief of CreativePro.com and *InDesign Magazine*.

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ExpressCard Buyers' Guide

Add-ons that make your MacBook Pro do even more **BY JEFF CARLSON**

With the MacBook Pro, Apple discarded the old PC Card slot in favor of ExpressCard/34, a more compact expansion slot that offers greater transfer speeds and an increasing array of uses. The ExpressCard format has a couple of advantages over the old PC Card format.

First, it's narrower: ExpressCard/34 cards are 34mm wide, compared with the 54mm PC Cards. (ExpressCard/54 cards do exist, but they don't fit in the MacBook Pro.) ExpressCards also require less power—1.5 volts, compared with 3.3 volts for the PC Card.

But their biggest advantage is speed. An ExpressCard passes data to the system at up to 2.5 Gbps; PC Cards supported speeds of only 1.06 Gbps.

ExpressCard Adapters The Belkin FireWire 800 ExpressCard (left) gives you two FireWire 800 ports. The Apiotek Combo ExpressCard Adapter has one USB 2.0 port and two FireWire 400 ports.

ExpressCard/34: Storage

PRODUCT	PRICE	TYPE
eSATA II 300 ExpressCard Adapter Apiotek www.apiotek.com	$39	eSATA adapter
ExpressCard 34 6-in-1 Belkin www.belkin.com	$60	card reader
ExpressCard 11-in-1 Reader/Writer SIIG www.siig.com	$43	card reader
ExpressCard 34 CompactFlash Adapter Belkin www.belkin.com	$60	card reader
ExpressCard 34 Solid State Drive 16GB Belkin www.belkin.com	$400	solid-state storage
EZQuest 2 Port eSATA PC ExpressCard EZQuest www.ezq.com	$89	eSATA adapter

Here is just a sampling of the ExpressCards available. It's by no means encyclopedic, but it should give you an idea of how you can expand your laptop's powers.

Storage

After using (and frequently leaving behind) USB memory card readers and cables to transfer digital photos from my camera's Secure Digital memory cards to my Mac, I now use an ExpressCard reader. Devices such as the SIIG ExpressCard 11-in-1 Reader/Writer (www.siig.com) can read and write to plenty of card formats, such as SD or Sony Memory Stick.

They're a bit faster than the Mac's USB 2.0 port; in my testing, 1.2GB of digital photos transferred about 26 seconds faster via the ExpressCard (1 minute and 23 seconds) than over a USB cable connected directly to the camera (a Nikon D80) equipped with USB 2.0 (1 minute and 49 seconds).

ExpressCards generally also sit flush with the MacBook Pro's case, so you can leave them in the slot all the time, rather than popping them in and out. (The exception: ExpressCards that read CompactFlash memory.)

Be sure to pay attention to the cards' specs as you shop. Many models can't read SDHC (Secure Digital High Capacity) cards with capacities greater than 4GB.

ExpressCards can also provide something that isn't otherwise available on a Mac laptop: a way to connect external hard drives that support the faster eSATA (external Serial ATA) interface.

With a maximum throughput of 2.5 Gbps, an ExpressCard comes close to keeping up with eSATA's 3-Gbps capacity.

PHOTOGRAPHY BY PETER BELANGER

Could String Theory Be the Long-Sought "Theory of Everything"?

Explore One of Today's Most Thrilling Ideas in Modern Physics with a DVD lecture Series for Non-scientists

One of the most exciting scientific adventures of all time is the search for the ultimate nature of physical reality, a hunt that in the last century has yielded such breakthroughs as Einstein's theory of relativity and quantum mechanics, two theories that radically altered our picture of space, time, gravity, and the fundamental building blocks of matter.

The latest advance in this epic quest is string theory—known as superstring or M-theory in its most recent versions. Based on the concept that all matter is composed of inconceivably tiny filaments of vibrating energy, string theory has potentially staggering implications for our understanding of the universe.

Wouldn't you love to understand string theory at a deeper level than is available from popular articles or even book-length treatments? Aren't you eager to look over the shoulder of a prominent string theorist at work—one who has a gift for explaining the subject to nonscientists and who has created computer-generated images to help make the concepts clear?

The Teaching Company offers just such a guide in Professor S. James Gates, Jr., director of the Center for String and Particle Theory at the University of Maryland. Dr. Gates has presented nearly 100 public talks on string theory.

The 24 lectures in **Superstring Theory: The DNA of Reality** incorporate Dr. Gates's matchless set of graphics, which introduce you to such concepts as hidden dimensions, dark matter, sizzling black holes, and a theory-destroying monster called the tachyon.

Spaghetti Strands

The essence of string theory is that the smallest, most fundamental objects in the universe are not little balls, knocking around like billiards, as had been thought for about 2,000 years. Instead, these small objects are super-microscopic filaments—like tiny strands of spaghetti—whose different vibrational modes produce the multitude of particles that are observed in the laboratory.

One of the most celebrated features of the string approach is that it predicts more dimensions than the three of our familiar spatial world plus one of time.

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4. Honey, I Shrunk to the Quantum World—Part I
5. Honey, I Shrunk to the Quantum World—Part II
6. Dr. Hawking's Dilemma
7. I'd Like to See a Cosmos Sing in Perfect Harmony
8. Einstein's Hypotenuse and Strings—Part I
9. Einstein's Hypotenuse and Strings—Part II
10. Tying Up the Tachyon Monster with Spinning Strings
11. The Invasion of the Anti-Commuting Numbers
12. It's a Bird—A Plane—No, It's Superstring!
13. Gauge Theory—A Brief Return to the Real World
14. Princeton String Quartet Concerti—Part I
15. Princeton String Quartet Concerti—Part II
16. Extra Dimensions—Ether-like or Quark-like?
17. The Fundamental Forces Strung Out
18. Do-See-Do and Swing Your Superpartner—Part I
19. Do-See-Do and Swing Your Superpartner—Part II
20. A Superpartner for Dr. Einstein's Graviton
21. Can 4D Forces (without Gravity) Love Strings?
22. If You Knew SUSY
23. Can I Have that Extra Dimension in the Window?
24. Is String Theory the Theory of Our Universe?

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(These numbers are theoretical maximums; real-world performance rarely matches them due to system overhead and other factors.) Some eSATA ExpressCards offer more than one connector, so you can connect multiple drives.

Don't want to tether your laptop to an external drive while you're traveling? You can also get ExpressCards that have solid-state storage of their own, such as the Delkin ExpressCard 34 Solid State Drive 16GB (www.delkin.com).

Get the Right Card When buying ExpressCards for your MacBook Pro, make sure you get the right size: the 34mm card (left) will fit, the ExpressCard/54 format (right) won't.

Connectivity

A MacBook Pro includes a limited number of USB and FireWire ports. You can add more cable connections via the ExpressCard slot. Its high capacity provides plenty of bandwidth to handle multiple FireWire 800, FireWire 400, and USB 2.0 ports, or combinations of those.

Using an ExpressCard to multiply your ports means that you can leave other hardware at home: these cards can replace a dedicated USB hub, so that's one less thing to pack in your laptop bag. You can also forget your hub's AC power brick. Because an ExpressCard with multiple USB ports lets you charge your phone (with the appropriate cable), iPod, and other items, you can leave their respective power bricks at home, too. And you won't pay a performance penalty: in my testing, I found no significant speed difference between copying large files via ExpressCard versus the MacBook Pro's built-in ports.

One of the more interesting uses of the ExpressCard slot is to connect multiple monitors. You can already connect one external display to the laptop's DVI port. But Village Tronic's ViDock Gfx (www.villagetronic.com) lets you connect up to three displays—four, if you count the MacBook Pro's own screen. The ViDock is a separate box with two DVI-I ports for connecting the displays and adapters; it can also output HDMI with an adapter (not included). The ViDock has 256MB of video memory that can drive screens at up to 2,560-by-1,600-pixel resolution, and there are no drivers or software to install.

(The ViDock Gfx initially was incompatible with first- and third-generation MacBook Pros; Village Tronic is working on the issue with Apple.) Also, be warned: Its fan is pretty darned loud.

And Much More

This list barely begins to cover the range of ExpressCards available for the MacBook Pro.

For example, as we noted in our recent story about cellular data networks ("The Portable Office," macworld.com/3704), you can get 3G modems in ExpressCard format.

Then there are miscellaneous cards such as the SiK Rex, a remote control that stores handily in the ExpressCard slot (it doesn't actually connect to the ExpressCard circuitry); Bluetooth VoIP phones; and even serial and parallel port adapters. The PCMCIA (Personal Computer Memory Card International Association, www.expresscard.org) offers a lengthy list.

If you own a MacBook Pro, you probably chose it because it offers more than the MacBook—a larger screen, better video memory, and FireWire 800. Its ExpressCard/34 slot lets you add even more capabilities.

Jeff Carlson is the managing editor of TidBits (www.tidbits.com) and the author of *The Apple TV Pocket Guide*, second edition (Peachpit Press, 2008).

Multiple Displays Connect up to three displays to your MacBook Pro with the ViDock Gfx.

ExpressCard/34: Connectivity

PRODUCT	PRICE	CAPABILITY
FireWire 800 ExpressCard Belkin www.belkin.com	$100	two FireWire 800 ports
Gigabit Ethernet ExpressCard Belkin www.belkin.com	$68	Gigabit Ethernet
Combo ExpressCard Adapter Aplotek www.aplotek.com	$40	two FireWire 400 ports, one USB 2.0 port
ViDock Gfx Village Tronic www.villagetronic.com	$500	connects multiple monitors

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powermax.qxd 7/14/08 3:50 PM Page 89

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3 Geek Tips

Master Time Machine, the defaults command, and RSS feeds

Sometimes, Mac technologies just work. But then sometimes, they don't. In that spirit, we offer the following three tips for taking greater control of Time Machine backups, program preferences, and RSS feeds.

Manage Time Machine

For most Leopard users, Time Machine simply works: switch it on and it will back up your hard disk every hour. But you can, if you wish, take a more proactive approach.

For example, you can make sure you've backed up *only* the latest version of a file. To do so, first prune its old backups: in the Time Machine interface, select the item, and choose Delete All Backups Of from the Action menu (denoted with a gear icon). Then select the Time Machine icon in the menu bar and choose Back Up Now. You can also prune a single snapshot: navigate to the desired time and date and then choose Delete Backup.

If you want to find out if you've got unnecessary backups of a file, Time Machine Perspective (macworld.com/3715)—a hacked version of the utility GrandPerspective—can help. This version makes it easier to spot large files that change more often than your backup schedule can handle (such as mailbox databases; this is particularly helpful if you also prune snapshots).

Finally, if you want some really powerful Time Machine backup management, try the command-line tool tms (macworld.com/3717). How many different versions of artsyPhotos.ivc have I backed up? The `tms log` command tells me. Other useful options are `tms snapshots`, which lists all your snapshots; `tms snaplog`, which reveals extensive information logged while making a snapshot; and my favorite, `tms delta`, which tells you what files in a snapshot differ from those in the previous snapshot (and therefore occupy actual backup space).—MATT NEUBURG

Time Machine Perspective Using this utility, you can see which files on your Time Machine backups are taking up too much hard-drive space.

Explore Defaults

Much of the time, you can use a program's Preferences dialog box to change its settings. But the `defaults` command can give you access to preferences that are not available from the GUI. Here are some general guidelines for using `defaults`.

The generalized format for any default command is `defaults write` *`preferencefile key newvalue`*. So, for example, the command `defaults write com.apple.dashboard mcx-disabled -boolean YES` means, "In Dashboard's preference file (com.apple.dashboard), change the Boolean key mcx-disabled to YES"—or in plain English, turn Dashboard off. (You'll need to type `killall Dock` for the command to take effect.)

All "modern" preference files—meaning those in XML format that follow Apple's guidelines—can, in theory, be changed using the defaults system. (There are still lots of programs that have their own binary preference files.) Most of these files reside in the *youruserfolder*/Library/Preferences folder. To see inside these files, you can use the `defaults read` command: For example, to see what's in Safari's preferences file, type `defaults read -app Safari`.

Break glass in case of an emergency.

You never know when your Wi-Fi or broadband connection might be compromised. Just in case, it's good to have a USRobotics 56K USB Modem on hand.

The USRobotics 56K USB Modem delivers the performance and reliability USR is known for, in a compact design.

- USB convenience and ease of use, with simple Plug and Play installation
- Bus-powered so it doesn't require an external power supply
- Excellent compatibility, works with Macintosh OSX, Linux, and Windows
- Controller based modem handles all communications processing functions freeing your Mac from any additional processing
- Small and light, it fits into any laptop bag for easy storage

Broadly compatible across major operating systems including Mac, Linux, and Windows, the USR 5637 USB Modem is perfect for:

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- Business travelers with laptops and no internal modem for office access (when broadband isn't available)
- Laptop and desktop users that desire "back-up" access to the Internet in case of broadband failure
- Home and business users that need fax capability to and from their computers

www.usr.com/MW/56k

USRobotics®

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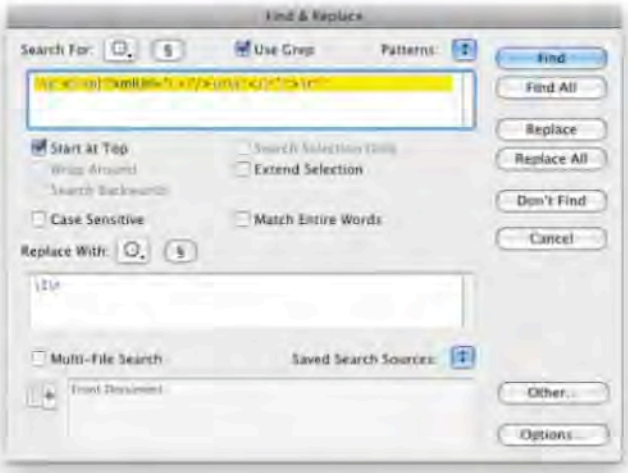
Theoretically, you can change any key you find in an XML preferences file. Standard preferences, such as those found in a program's Preferences window, frequently are documented. But lots of programs contain lots of undocumented preferences.

Most of the switches for these keys are Boolean: on/off, true/false, or 0/1. Some use a `-boolean` flag followed by `YES` or `NO`, or a `-bool` flag followed by `TRUE` or `FALSE`. And most are reversible: for example, you can turn the Dock back on by issuing the command `defaults write com.apple.dashboard mcx-disabled -boolean NO` (followed by another `killall Dock`).

Changing hidden preferences can lead to undesired consequences, so don't start typing randomly just to see what happens. But at least now you know what you're doing next time someone suggests you start a command line with `defaults`.—KIRK MCELHEARN

Import RSS Feeds

NetNewsWire (www.newsgator.com) is a fantastic RSS reader, but some people prefer the convenience of having their e-mail and news feeds in a single application. Even though the Leopard version of Mail supports RSS, it can import existing feeds only from Safari. If you previously used NetNewsWire (or another news reader), here's how to import your subscriptions into Mail.



Converting OPML to Plain Text To convert a NetNewsWire subscription to an Apple Mail one, you have to first convert the OPML file to plain text.

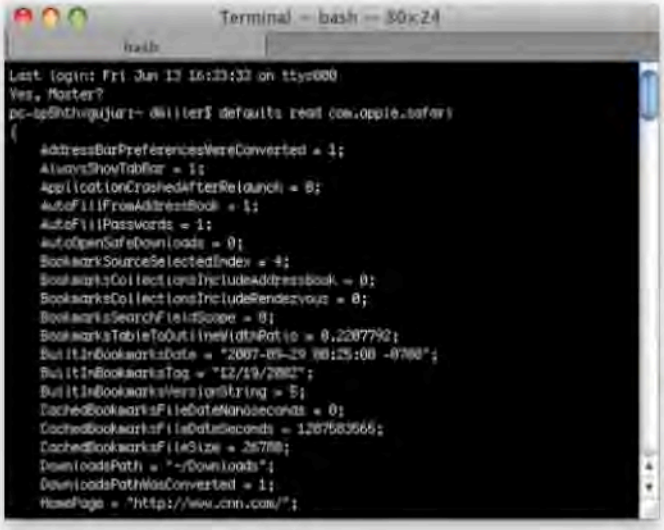
The only thing you need is a text editor that supports grep-based pattern matching. Bare Bones Software's free TextWrangler (★★★★★; macworld.com/0378) and the $125 BBEdit (★★★★½; macworld.com/2414) both do; Apple's own TextEdit, unfortunately, does not.

To start, in NetNewsWire choose File: Export Subscriptions. Next to Export, select All from the Format pop-up menu. You can choose either export format, OPML (Flat) or OPML (With Groups). Leave the default name (MySubscriptions) and destination (Desktop), and click on Save.

Next, open the MySubscriptions file you've just created in TextWrangler or BBEdit. Choose Search: Find. At the top of the Find & Replace window, select Use Grep. Now enter the following, with no spaces, in the search field (at the top of the window): `^\s*<[^\n]*?xmlUrl="(.+)"/>\r(\s*</[^"]*>\r*)*`. In the replace field (near the bottom of the window), enter `\1\r`. Make sure to select the Start At Top check box, and click on Replace All.

Still in your text editor, select all the text and choose Edit: Copy. Switch to Mail and choose File: Add RSS Feeds; make sure Specify A Custom Feed URL is selected. Click in the text field and choose Edit: Paste. Then click on Add. That's it—your feeds should now appear in the RSS section of your Mail window.

I do have two caveats about this trick. First, whatever folder structure you had in NetNewsWire won't survive this transfer; you'll have to recreate your folders manually. To do so, choose Mailbox: New Mailbox. From the pop-up Location menu, choose RSS. Type in the name of a folder and click on OK. You can then drag feeds into your new folders. Second, though this technique should work when you export OPML files from other news readers, I can't guarantee that it will work with *every* other RSS program.—JOE KISSELL



Decoding Defaults With the `defaults read` command, you can see which preferences can be changed with the `defaults write` command.

Joe Kissell is the senior editor of TidBits (www.tidbits.com) and the author of numerous e-books about OS X (www.takecontrolbooks.com). **Kirk McElhearn** (www.mcelhearn.com) is a regular contributor to *Macworld* and TidBits. **Matt Neuburg** is a contributing editor of TidBits and the author of *Take Control of Customizing Leopard* (TidBits Publishing, 2008; www.takecontrolbooks.com).

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Help Desk

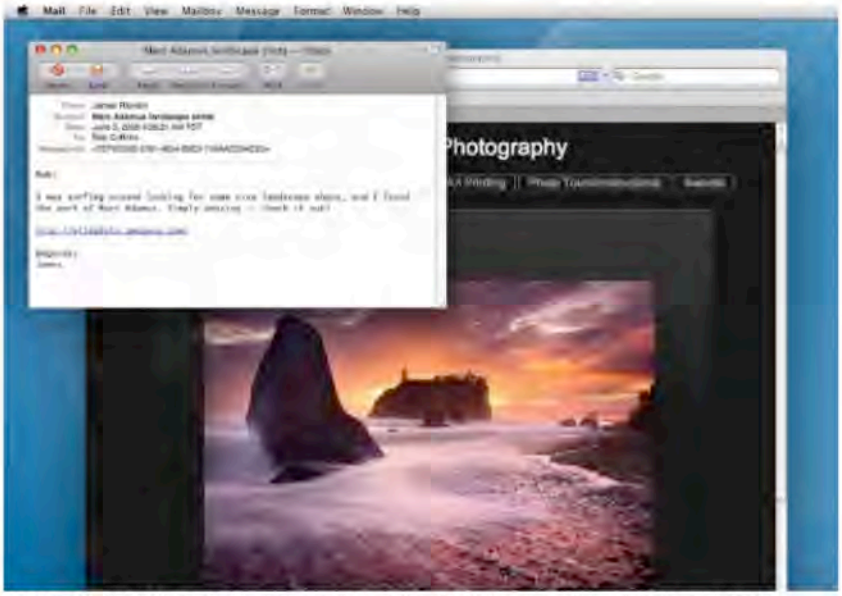
Mac OS X Hints

The insider tips you won't get from Apple **BY ROB GRIFFITHS**

Leave Links in the Background

Do you receive many a URL-laden e-mail message? Normally, when you click on a link in Apple's Mail, the Web page opens in your preferred browser and comes to the foreground. However, when I'm reading e-mail, I usually prefer to keep reading the message and just check the link when I'm done. If you're running OS X 10.4 (Tiger) or OS X 10.5 (Leopard), ⌘-clicking on the link will open the Web page in the background, so you can keep reading your mail.

As a side hint, remember that you can always see the actual URL for a link in Mail just by hovering over the hyperlink—Mail will then pop up a tooltip showing the actual address. This is a good way to make sure you're opening the Web page you intend to, rather than a nefariously disguised link.



Manage E-mail Links By ⌘-clicking on links in Apple's Mail, you can force them to open in the background, leaving you free to continue to read your messages now and check the Web pages later.

Open a New Window When Switching Programs

Most OS X programs will run without any open windows—close the last one, and the program keeps running. If you switch to that program by clicking on its Dock icon, a new window appears, ready for your use. Not so, though, if you activate the program by using the ⌘-tab application switcher. In that case, you switch to the program but no new window appears, which means that you have to press ⌘-N to open a new window.

Here's a trick you can use—in Leopard only—to force the application switcher to open a new window. Let's say you launched Apple's Safari, browsed for a bit, and then closed your last browser window. You then switched over to Apple's TextEdit, but now you want to check a Web page. To activate Safari and open a new window, press ⌘-tab until Safari is highlighted in the application switcher. Still holding down the ⌘ key, press and hold the option key. Release the ⌘ key first and then the option key. Safari will spring to the foreground, and a new window will appear.

If the program already has an open window, this trick won't open a second one. Instead, the already-opened window will be active when you switch. If the program you're switching to has a docked window—but no other open windows—this trick will spring that window free from the Dock. This is a handy way to free docked windows without relying on the mouse. Note that this trick may not

Have a Hint to Share?
Go to MacOSXHints.com to submit it. This column was based on tips from Egil Hellan, Brad Lappin, Emmanuel Mimoun, Makis Protoulakis, and anonymous contributors. Each month, the author of our favorite tip receives a *Help Desk* mug.

MUG PHOTOGRAPH BY PETER BELANGER

work in every program, but testing it yourself with the applications you use the most is quick and easy.

Horizontal Scrolling for Older Mice

If the electronic rodent attached to your Mac is of an older vintage, it may not include the latest bells and whistles, such as the all-directions scroll ball that comes with Apple's Mighty Mouse. Stuck with a unidirectional scroll wheel, you may think you're missing out, but in fact, though you can't scroll diagonally with your mouse, you can scroll horizontally and vertically in most programs.

How? Just hold down the shift key prior to spinning your scroll wheel, and you'll scroll horizontally instead of vertically—scrolling down moves the page to the left, and scrolling up moves the page to the right. This should work in almost every program. I tested the major browsers and Apple's offerings (including the Finder), and the trick worked in all of them. Although there are good reasons to buy a new mouse, if all you feel you're missing is horizontal scrolling, try the shift key before reaching for your pocketbook (see "Old Mouse, New Trick").

Use a Spring-Loaded Path Bar in the Finder

Leopard's Path Bar is like a trail of breadcrumbs to help you navigate today's immense hard drives. Once enabled in the Finder (View: Show Path Bar), it resides at the bottom of each Finder window, displaying the full path to the currently selected folder. You can control-click on any item in the Path Bar and use the resulting contextual menu to open it or its enclosing folder.

But one thing you can't do is automatically open a new Finder window by dragging an object over an item in the Path Bar, hovering, and then pressing the spacebar, as you may wish to do when moving a file, for instance. As it turns out, however, the Finder's Path Bar does become "spring-loaded" in one situation—when you use Spotlight to find files.

For example, let's say you have a folder called Clients, and within that, a folder for each client you work with. You realize that you've misfiled a number of documents for a certain client. Using Spotlight, locate those files and then select them all. Drag them over the Clients folder on the Path Bar, press the spacebar, and—presto—a new Finder window opens. Now just drag the files into the proper folder at the top level of the Clients folder, and you're done.

Proxy Icon Path By ⌘-clicking (or, in Leopard, control-clicking) on the proxy icon at the top of an OS X window, you can see the full path to the currently opened file. If you try the same trick in Safari, you'll see the full path to the root of the currently viewed Web site.

See File Paths Using Title Bar Icons

Wondering where a file you're working on is saved? Just ⌘-click on the *proxy* icon and accompanying text in the title bar of most OS X windows to see a drop-down menu with the currently active document's path. In TextEdit, for instance, ⌘-click on the icon in the document's title bar, and you'll see the full path to that document's save location (see "Proxy Icon Path"). Select one of the folders on the path, and that folder will open in the Finder. In Safari, you'll see the path to the current page from the root of the Web site; select one of the other entries in the list to load that page in the browser.

If you're running Leopard, it's now a little easier to use this trick. You can choose to control-click on an icon to access its path. This means that if you have a multibutton mouse, you can make the drop-down menu appear with a click of your right mouse button—no need to hold a key on the keyboard and use the mouse at the same time.

Old Mouse, New Trick Even if your mouse doesn't come with an all-directions scroll ball, a simple key command will probably let you scroll both horizontally and vertically.

WHAT'S ONLINE

Track Spotlight's Progress See how much of your hard drive Spotlight has indexed during a reindexing operation (macworld.com/3662).

Search for iTunes Lyrics in Leopard Use Leopard's Spotlight to search for lyrics in particular types of iTunes music files (macworld.com/3663).

Disable X11 Warning Learn how to disable the annoying warning you see whenever you try to quit X11 under Leopard (macworld.com/3664).

Put Displays to Sleep with the Keyboard

I don't like leaving my displays on when I leave my Mac for an extended length of time, because it wastes energy and shortens the potential life of the display. But I also prefer not to put my Mac itself to sleep because I often want to access it remotely, or download large files when I step away. Luckily, there are a number of ways to turn off *only* your displays.

For instance, you can go to the Energy Saver preference pane and use the Put The Display To Sleep When The Computer Is Inactive time slider. Personally, I find it hard to get the right setting here—it's annoying to have my displays switch off when all I've done is pause to think. Alternatively, you can use Apple's Keychain Access (in /Applications/Utilities). Select Keychain Access: Preferences and select the Show Status In Menu Bar option. When you do this, a new Keychain icon appears in your menu bar. Click on it and select Lock Screen to make your screen turn black. (You'll need to enter your password to turn it back on again.) Finally, you can go to the Exposé & Spaces preference pane (in Tiger and Leopard), click on one of the pop-up menus under Activate Screen Corners, and choose Sleep Display. Now when you drag your cursor to that corner and wait a second, your displays will go to sleep.

If you're using Leopard, though, there's a new hidden method that's easier to use than all the others and requires no use of the mouse or menus. Just press shift-control-eject, and all attached displays will instantly go to sleep. Move your mouse or press a key on the keyboard, and the displays awaken. It doesn't get much simpler than that. Note that if you've set your system to require a password whenever your computer wakes up from sleep or from your screen saver, that password prompt won't be triggered if you put your displays to sleep this way. You can still make it happen, though, by first activating your screen saver and *then* pressing shift-control-eject. The password dialog box will appear when you press the hot-key combination, but if you then click on Cancel, the displays should go to sleep.

Senior Editor **Rob Griffiths** runs the MacOSXHints.com Web site.

Brush Up on the Basics

Whether you're new to the Mac or you just want a refresher course, check out the *Mac Basics Superguide, Leopard Edition*. Created by the editors of *Macworld*, this 88-page book covers everything you need to know about getting started with OS X. To order the downloadable PDF, the CD, or the full-color printed book, go to macworld.com/superguide.

POWER TIP OF THE MONTH

Put Program Icons to Work

If you're ever in a situation where you need a high-quality version of an OS X program icon—say, for use in a presentation—it can be a bit of a chore to get it. The usual method, which I call the "find-the-icon-file-in-the-haystack game," goes like this: control-click on the program in question, select Show Package Contents from the contextual menu, and then navigate to the Contents/Resources folder. Somewhere inside, you should find a file with a name ending in *.icns*. Open that file in Preview, and you'll find the icons.

The problem with this approach is that there can be hundreds of files in the Resources folder, and the naming of the .icns file isn't necessarily logical, so it can take a bit of digging—or help from Spotlight—to find the right file. Luckily, there's a much simpler—although completely nonobvious—way to get all of a program's icons, at least if you're running Tiger or Leopard.

In the Finder, select the program in question, and press ⌘-C. You've now got a full copy of the program on your clipboard. (Don't believe me? Press ⌘-V after switching to another folder in the Finder—if you're going to do this, I suggest copying a small program and not something like the 337MB iWeb.) Now launch Preview, and press ⌘-N (File: New From Clipboard, for you menu users). You may be surprised at the result: a full copy of the chosen program's icons, in every available size including the gorgeous new 512-by-512-pixel versions available in many programs (see "Easy Access Application Icons").

Click on the desired icon size in Preview's sidebar and select File: Save As to save it in the file format of your choice. (If you want to retain the transparency, you'll need to use PNG or TIFF as the file type.) This trick worked with every program I tested it with. You can also use it to get document icons for things like Excel spreadsheets, Word documents, and so on. If you try this with a PDF, though, you'll find that Preview will actually paste in the entire PDF, not its icon.

Easy Access Application Icons Need to use a program's icon in a presentation? Use a little-known and very simple trick to see and save all of them—including the new 512-by-512-pixel versions available in many programs, such as Final Cut Express, that have been updated for Leopard.

ICON BY PAUL HOWALT

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Mac 911

Solutions to your most vexing Mac problems **BY CHRISTOPHER BREEN**

Wrestling with DVD Region Encoding

Q: I'm about to move to South Africa, and I have a small yet precious DVD collection that I'd like to take with me. Because I purchased them for use in the United States, they're in the NTSC format and not the PAL format that players use in other countries. I'm on the verge of purchasing a MacBook Pro, and I know that I'll be able to play the NTSC DVDs I already own on my Mac, but I was wondering if you had any idea if Apple's DVD Player (or, for that matter, SuperDrives themselves) supports PAL-formatted DVDs, because I may want to purchase some once I am there.

Via the Internet

Regional Viewing Wondering whether you can play that DVD your brother sent from Russia? Use DVD Player to see information about a disc's region encoding as well as how many more times you can switch the region on your Mac.

A: Your MacBook Pro will be able to play both PAL and NTSC discs, so on that front, you're set. Where you're going to run into trouble is with region encoding. Thanks to pressures from the motion picture industry, commercial DVDs come with their region of origin embedded in them, as do the majority of DVD players. The two must match for you to be able to play the DVD.

For example, you purchase Region 1 DVDs in the United States. When you first insert one of these discs into your MacBook Pro, you'll be told that you need to set the drive's region encoding to the same code as the disc. You're allowed to change the drive's region five times—you do so simply by putting a disc with a different code into the drive and playing it. After that, the drive is locked to the last-used region.

In South Africa, you'll purchase Region 2 discs. When you try to play one, you'll be prompted to change regions and you'll lose one of your five opportunities to switch regions. Play a Region 1 disc and you have to switch regions yet again and lose another switch. In Leopard's DVD Player program, you can see which region the currently inserted disc is encoded for as well as how many region switches you have left by choosing File: Get Disc Info and clicking on Regions (see "Regional Viewing").

Clearly, changing back and forth won't work for long if you have a lot of discs with different encoding. But unlike with some earlier SuperDrives, it's no easy matter to strip region encoding from the Matsushita drives in today's Apple laptops. And, just as with any drives packaged with the Mac, stripping region encoding mucks with the drive's firmware, thus possibly threatening the integrity of the drive and assuredly voiding its warranty.

That leaves you with two less-than-optimal computer-based solutions. The first is that you can try ripping your discs with the open-source and free Handbrake (●●●½; macworld.com/3651) or with the free MacTheRipper (●●●●; macworld.com/1271). Doing so turns the movies on your DVDs into standard movie files untainted by any kind of region information. What makes this a less-than-optimal solution is that the copy protection on some discs makes them impossible to rip. Also, ripped movies can take up a lot of storage space that you might wish to devote to more-important files.

Have a problem?
Go to the Mac 911 forum (macworld.com/2467) for help with your misbehaving Mac or applications.

The other Mac-centric solution is to purchase an external FireWire or USB DVD drive and play Region 1 discs in one drive and Region 2 in the other. This suggestion earns weak praise because it will cost you something and it's inconvenient to lug around another piece of gear. Speaking of another piece of gear, if you plan to purchase a TV in South Africa, why not purchase a cheap DVD player too? Companies such as Philips, Pioneer, and Toshiba sell region-free DVD players that play both PAL and NTSC discs.

Alphabetize Firefox Bookmarks

Q: How can I alphabetize my Mozilla Firefox bookmarks in the Bookmarks submenus or folders I place in the Bookmarks toolbar?

John Finnerty

A: Start by choosing Bookmarks: Organize Bookmarks. Now select a folder full of bookmarks in the left pane of the Bookmarks Manager window. The right pane will fill with that folder's contents. If you want to sort all the items in the right pane by name, just control-click on an item in the right pane and choose Sort By Name from the contextual menu. Firefox will first organize folders alphabetically and then follow those folders with alphabetized items that carry URLs. For example, if I select my Bookmarks Toolbar Folder in the left pane, click on the Apple folder (which is inside it) in the right pane, and choose Sort By Name, the Apple, Favorites, and Mac Stuff folders appear first in line. Google News, Latest Headlines, and Rhapsody follow after that.

If the right pane includes folders of its own—you've chosen the Bookmarks Toolbar Folder in the right pane, for example—click on the triangle next to one of the folders in the right pane, select an item within that folder, and control-click and choose Sort By Name again. The items within the folder will sort alphabetically. The alphabetical sorting will carry over into Firefox's Bookmarks toolbar as well as submenus in the Bookmarks menu.

ICONS BY PAUL HOWALT

Bugs & Fixes BY TED LANDAU

Time Machine Holdups Leopard's Time Machine doesn't always work smoothly, especially if it accesses your backup drive wirelessly via an AirPort network. For example, Time Machine may stick for several hours at the "Preparing..." stage of a backup, particularly when you remove a disk before ejecting it or go several days without using Time Machine. Apple's advice? No matter how long the preparing stage takes, wait, because if you interrupt it, the hang-up is likely to last even longer the next time. That's not necessarily so, according to Apple's Discussion Boards and sites such as MacFixIt. Many users claim that simply turning a backup drive off and back on will push Time Machine past the "Preparing..." hump. If nothing seems to work, start over by using Apple's Disk Utility (/Applications/Utilities) to reformat the drive.

Desktop Items MIA One frustrating and persistent OS X bug occurs when you save items to the desktop, only to find no trace of them there. Even if you start typing the first letters of the file's name to highlight it, nothing happens. Yet, the file *is* there. You can confirm this by making a second attempt to save the same thing. If you do, you'll get a message stating that the item already exists. This is one good way to find your file—click on Replace when you see this message, and there's a good chance that the missing file will now show up. If that doesn't work, select Go: Desktop (⌘-shift-D) in the Finder. A Finder window for the desktop folder opens. Often you'll be able to see the item here. At this point, doing almost anything to the item, such as double-clicking on it, will get it to appear on the desktop itself. In the rare case where the item still doesn't show up, option-click and hold on the Finder icon in the Dock. Select Relaunch from the menu that pops up, and the Finder will quit and relaunch. All the desktop items will briefly vanish and return, including the formerly MIA item.

Permissions Pickles If you get the error "You don't have sufficient access" or "You don't have appropriate access privileges" when you try to rename items in the Finder or save files, you've got permissions problems. But what do you do if using Disk Utility's Repair Disk Permissions command has no effect? In that case, you may have to put Terminal (/Applications/Utilities) to work. Launch it, type the command `sudo chmod -RN ~`, and press return. Enter your administrator password when asked. Next, start up from a Leopard Install DVD and select Reset Password from the Utilities menu. Leopard sports a new option here—Reset Home Directory Permissions And ACLs. Select your user account and click on Reset. After you restart your Mac, the error messages should be gone.

Senior Contributor **Ted Landau** is the founder of MacFixIt (www.macfixit.com). Share your problems at bugs@macworld.com or on Macworld.com's Mac 911 forum.

Apple's Mail and Its Hidden Headers

Q: Mail's junk mail filters work pretty well, but sometimes I need to look at a message in the Junk folder to determine if it's really spam or if it's coming from a new contact. In other programs, I've been able to view long headers or the raw source without *opening* the actual message, which I prefer not to do. But in Mail, that doesn't seem to be an option—the menu items are grayed out until you open the message. Is there a way around this?

Via the Internet

A: Nope, you can't view headers or a message's source in Mail without opening the message itself. But before you dash off to install a different e-mail program, let's examine the real threat here. That threat is HTML links—particularly links to graphics that, when loaded, send a little "yoo hoo!" message to spammers, letting them know that they've found a live one.

You can keep these images at bay in Mail a different way. Choose Mail: Preferences, click on the Viewing tab, and make sure that the Display Remote

Images in HTML Messages option is not selected. Without these links loaded, you should be safe, as simply displaying a message's text in the preview pane won't alert a spammer that you've gotten the message.

Send iCal Invites to the Many

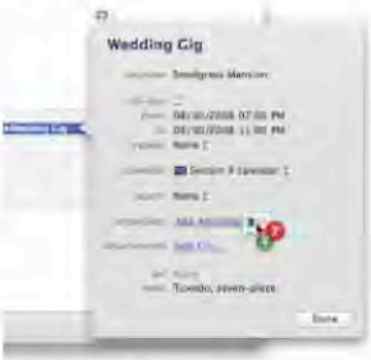
Q: Can Apple's iCal let me e-mail an event invitation to multiple users?

Via the Internet

A: It wouldn't be much of a calendar program if it couldn't! In Leopard's version of iCal, click on the event and press ⌘-E to edit it. Click on Add Attendees and type the name of a person you'd like to invite. If you've entered that person's e-mail address in Address Book, iCal will put the address in for you. If not, just type the address.

To add another address, type a comma and enter the new name (if he or she is in Address Book) or the address. Repeat as necessary. When you've finished entering addresses, press return and then click on Send. Mail will launch and send an event invitation to the addresses in the Attendees field.

Alternatively, you can add multiple attendees by dragging individual contacts or an entire group directly from Address Book onto the Add Attendees link (see "Add Multiple Attendees"). This method is very efficient when you want to quickly add all the members of your platoon, bridge club, or extended family.



Add Multiple Attendees It's easy to send an event invitation to more than one person. Just drag a collection of contacts from Address Book to iCal's Attendees link.

TOOLS OF THE TRADE

Of Keys and Keyboards

As much as you love your Mac, you spend just as much time with your Mac's keyboard. Why not make it the keyboard you love rather than one you simply tolerate? This fistful of tips and tools will get you started.

Matias Folding Keyboard I like my MacBook Pro, but I'm not wild about its keyboard, particularly when I'm using a program such as Microsoft Excel and typing in a lot of numbers. A portable solution is at hand in the form of Matias Products' $70 Matias Folding Keyboard (macworld.com/3652). As its name hints, this is a full-size keyboard (complete with number pad and 15 function keys) that folds in the middle. Just unfold it and jack it into your laptop's USB port.

Caps Lock Begone I can count on one hand the number of times I've *intentionally* invoked the caps lock key. To ensure that I never again have to deal with an unwanted string of capital letters, I've switched the key off by opening the Keyboard & Mouse preference pane, selecting the Keyboard tab, clicking on Modifier Keys, and, in the resulting sheet, choosing No Action from the Caps Lock pop-up menu.

Kill Help Only one key annoys me more than the caps lock key—the help key. I routinely hit the thing when attempting to reach the delete key. And when I do, up pops some unwanted help that I must dismiss before getting back to whatever I was doing. Although it's overkill to use such a capable keyboard macro utility for this job, this is one of the many tasks I assign to Stairways Software's $36 Keyboard Maestro (www.keyboardmaestro.com). I just create a macro that, instead of producing a Help window, essentially tells the key to do nothing for a second, and I assign the macro to the help key.

Moving Mail Accounts Offline

Q: I've got a whole bunch of e-mail accounts that are halfway bogus or that I don't want checked regularly but also don't want to delete. Is there a way to customize the Get Mail button in Apple's Mail so that it checks only certain accounts? I've set the automatic checking to do this, but the Get Mail button still checks all of my accounts.

Andy Milder

A: You have a couple of options for barring specific accounts from retrieving mail. As you mentioned, you can keep an account from being checked automatically by selecting Mail: Preferences, clicking on Accounts, selecting an account, clicking on the Advanced tab, and disabling the Include When Automatically Checking For New Mail option.

This option has no effect on what happens when you click on Mail's Get Mail button, but the check box just above it does. Disable the Enable This Account option, and the account disappears from Mail's list of mailboxes. Now you can press Get Mail until doomsday, and the disabled account will be left alone.

If you want an account ignored only occasionally, this isn't the best way to go, because you have to dig down into Mail's preferences to switch it on or off. A more expedient route is to control-click on the account's Inbox in Mail's list of mailboxes and choose Take "*name of account*" Offline. (Alternatively, you can choose Mailbox: Online Status and, from the submenu, choose Take "*name of account*" Offline.) A tilde-like symbol (~) appears next to the account name in your Mailboxes list. Press the Get Mail button, and the offline account will be ignored. To bring it back online, simply click on the tilde-like symbol.

Senior Editor **Christopher Breen** is author of *The iPhone Pocket Guide*, second edition, and *The iPod and iTunes Pocket Guide*, third edition (Peachpit Press, 2008).

ICONS BY PAUL HOWALT

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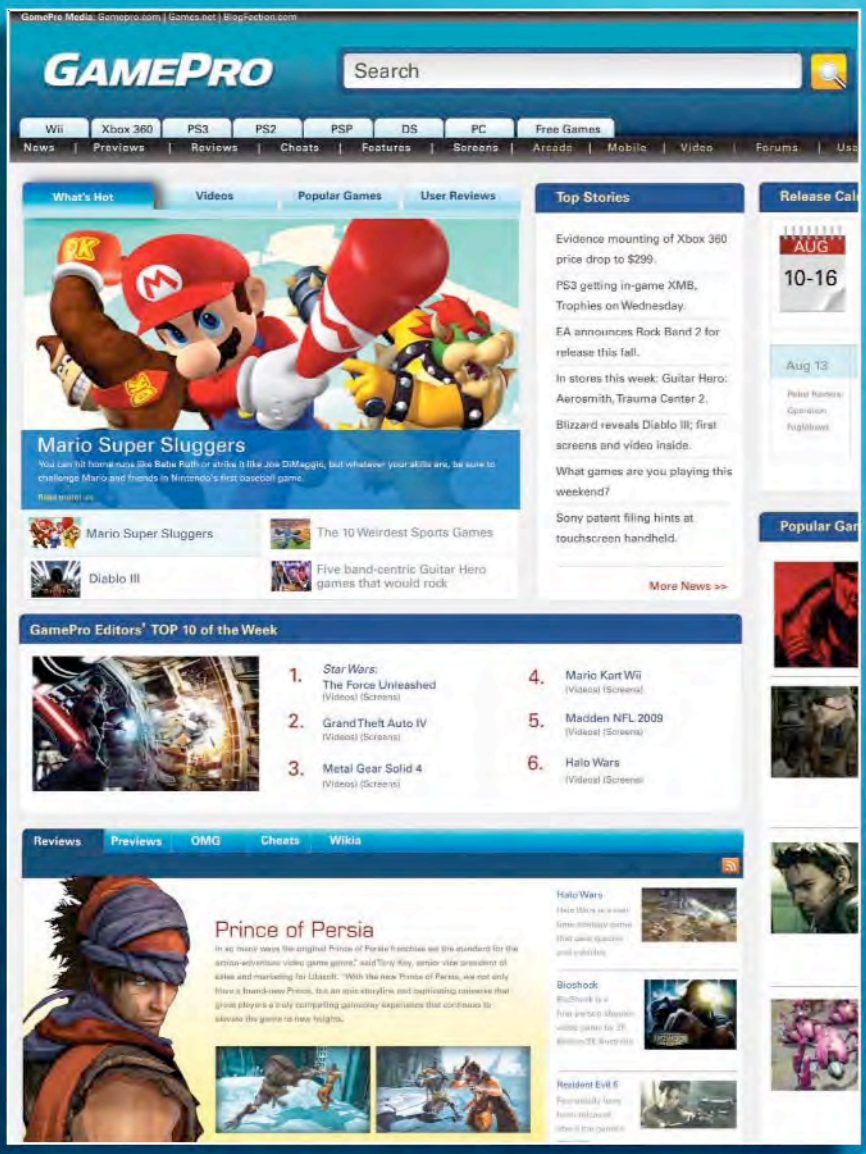

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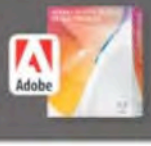

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Acme Made	acmemade.com	112
Ambrosia Software	ambrosiasw.com/mw	71
AmericasPrinter.com	americasprinter.com	113
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Blue Microphones	bluemic.com	79
Bookendz	bookendzdocks.com	109
Booq LLC.	booq.com	28
Buffalo Technology	buffalotech.com	65
CDW	cdw.com	41
Circus Ponies Software, Inc.	circusponies.com	81
Citrix Systems	gotomeeting.com	10
Cognito Software, Ltd.	cognito.co.nz	108
Creative Juices	bigposters.com	114
Dr. Bott	drbott.com	8-9
DriveSavers Data Recovery Inc.	drivesavers.com	116
EazyDraw	eazydraw.com	107
Elgato	elgato.com	45
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ESS Data Recovery	datarecovery.com	113
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Freeverse	freeverse.com	12, 14
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ZAGG	invisibleshield.com	112
Zco	zco.com	112
Zoo Printing	zooprintingtrade.com	114

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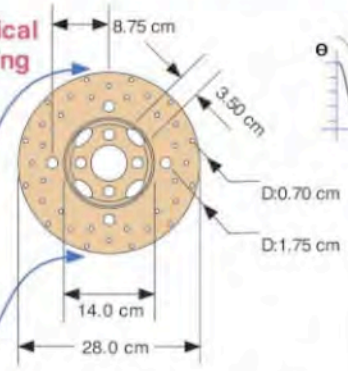

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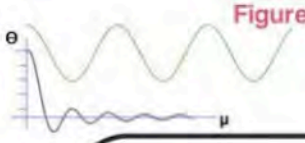

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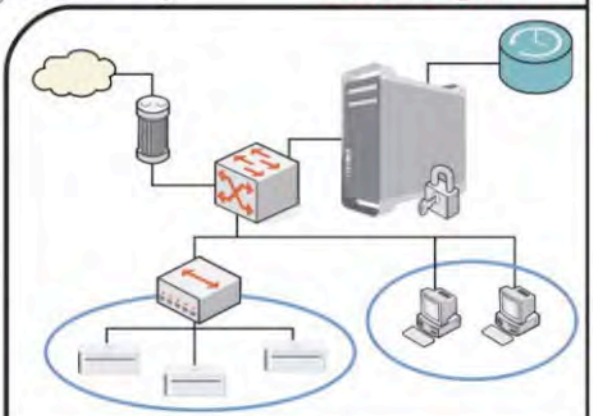
Network Diagrams



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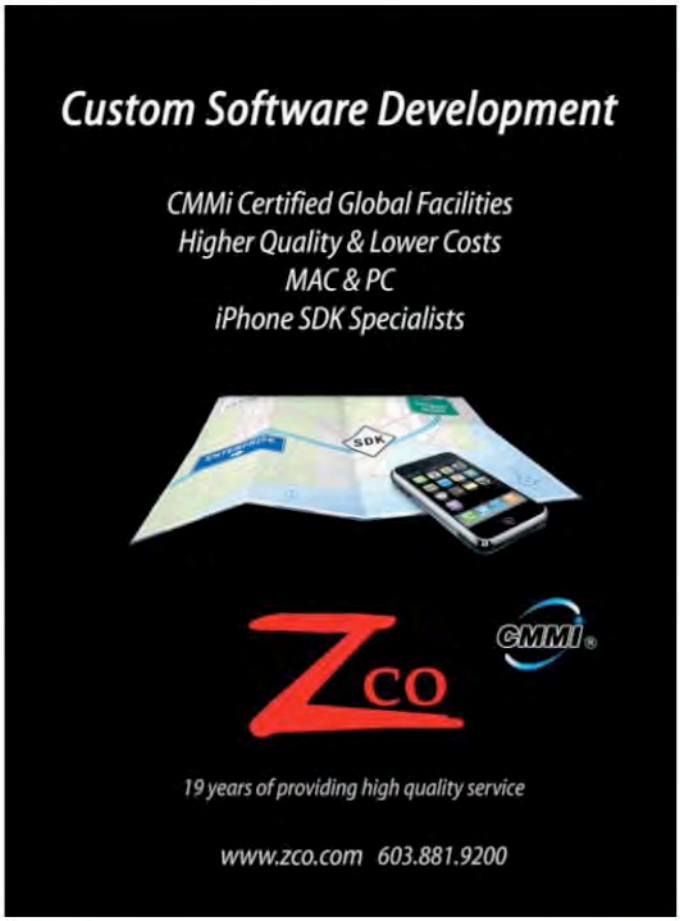
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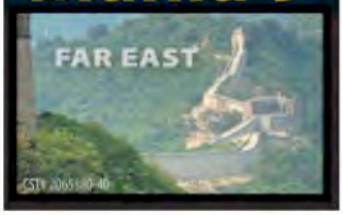

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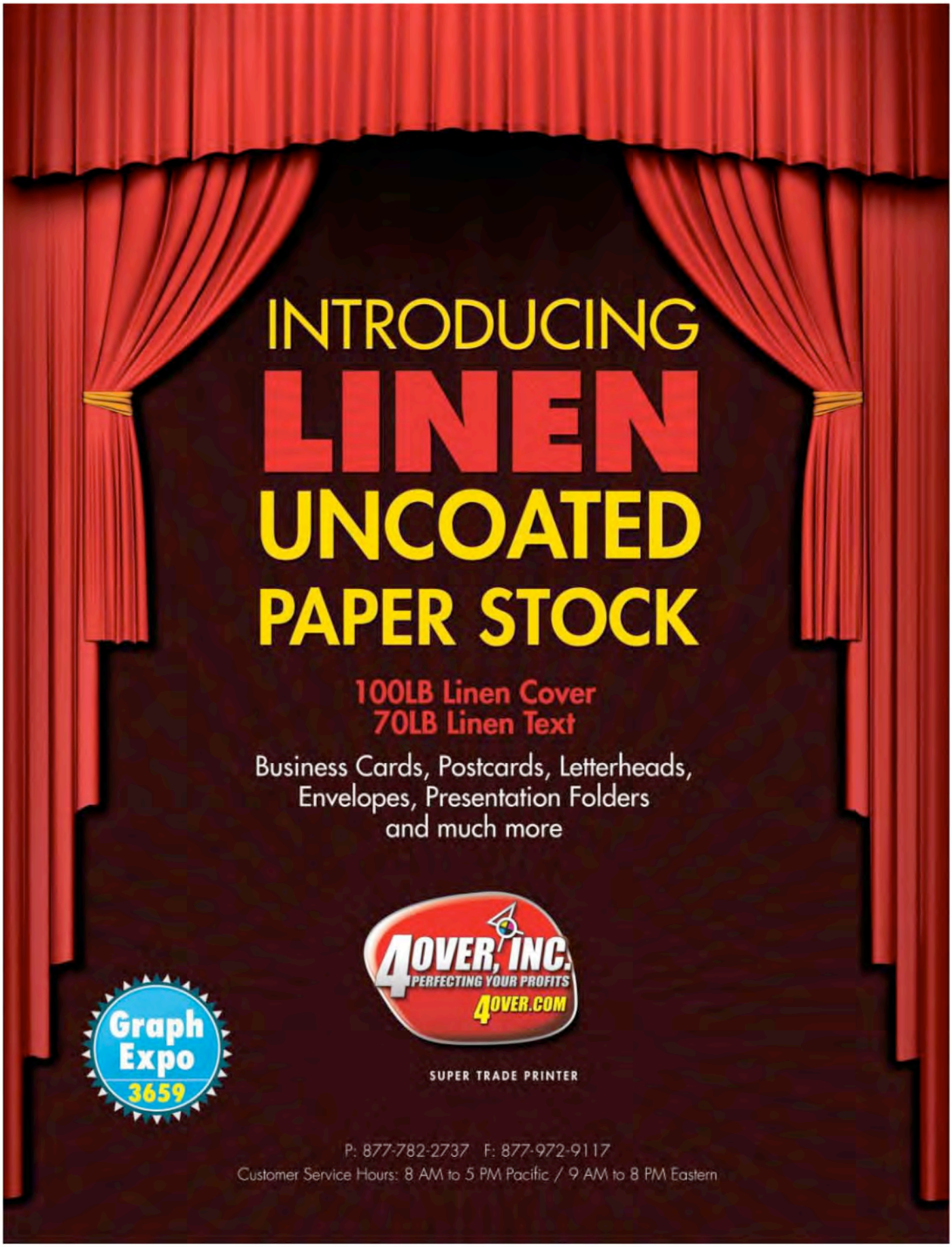
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Why only suckers try to predict Apple's next move

While recently rewatching all 176 episodes of *Star Trek: Deep Space Nine* (don't ask), one story line caught my attention: a time-travel adventure that saw several characters transported to Earth in 2024.

It's funny how technology that seemed futuristic to TV writers in 1995 looks so primitive today. In the 1950s, the future was full of jet packs and flying cars. In the 1990s, it was full of CRT monitors and cell phones the size of bricks.

I think Forrester Research's recent predictions about the Apple of 2013 will look just as laughably archaic five years from now (see macworld.com/3730).

Forrester's predictions range from the blindingly obvious (the iTunes Store will evolve to handle other sorts of content, and the Apple TV will gain more features) to the faintly ridiculous (Apple will move into the home-automation market and will create lines of digital picture frames and clock radios).

I'm not saying that Forrester's predictions will be entirely wrong. But honestly, if it were so easy to divine Apple's plans, we wouldn't be quite so wowed by the technologies Steve Jobs and company unveil on a regular basis.

Also, we would all be stinking rich.

The Future Is Yet to Come

We at *Macworld* do our own fair share of peering into the crystal ball. I've made some prognostications of my own on occasion. Though those predictions have largely come true, most were one step above saying that Steve Jobs would wear a black turtleneck to his next keynote.

Still, I have some issues with Forrester's predictions.

For starters, if you're trying to predict a future full of Apple devices, I think you need to look at the moves Apple has made in the home so far. And if you do, you'll see that many of those moves have not ended well. Its attempt at an iPod speaker system, the iPod Hi-Fi (macworld.com/1215), never rose above a crowded field of competing devices. And even Steve Jobs has conceded that the first version of the Apple TV was a failure.

But more generally, the products that Forrester is predicting fly in the face of Apple's design aesthetic. Think of the Mac mini, the AirPort Extreme, and the Apple TV: these are small boxes that aren't covered with buttons or distracting lights, that are designed to be stacked out of sight. Filling your home with a network of digital knickknacks doesn't really seem like the Apple way.

Forrester also suggests that providing an in-house installation team is the logical extension of Apple's Genius Bar customer support. But that's silly: Apple has always made a point of creating technology that's easy for *anyone* to set up. Think of the original iMac (take it out of the box, plug it in, turn it on) or the fact that you activate your iPhone via iTunes. The whole point of Apple's technology is that you don't *need* anyone to help you—it would be like asking someone to help you turn on your oven or open your window.

Forrester's Apple predictions ranged from the blindingly obvious to the faintly ridiculous.

I keep coming back to Steve Jobs's Thoreauvian belief in simplicity. Where Forrester sees a proliferation of clock radios and digital picture frames, I see technology that's all about not being ostentatious. Steve's tenets of simplicity and elegance have been a constant over the years, and Apple continues to be about creating technology that's so easy to use you don't even notice you're using it.

No Penalty for Predictions

Like most prognostications, Forrester's report lies in that hazy area between right and wrong. Predicting the future is hardly an exact science—or *any* kind of science. In a world where weather forecasters often can't give a simple yes or no answer to a question like "Is it going to rain tomorrow?" the idea of guessing what a company—a notoriously unpredictable company, at that—will look like five years from now is an exercise in futility.

Could Apple do the things Forrester suggests? Almost certainly: in fact, many of the things that the report predicts are well within the company's reach today.

But when it comes to Apple, the interesting questions never begin with "Could it..." but rather with "*Would* it...." Apple chooses its battles carefully, and it likes to make things that delight and surprise people. Would anyone in 2002 have predicted that Apple would make the iPhone—much less the subtle nuances of how it would work or what it would look like? I doubt it.

In the end, predicting the next big thing out of Apple is a sucker's game, because there's only one sure thing: It'll be something that *nobody* predicted.

Dan Moren is a *Macworld* associate editor and the editor of MacUser.com.

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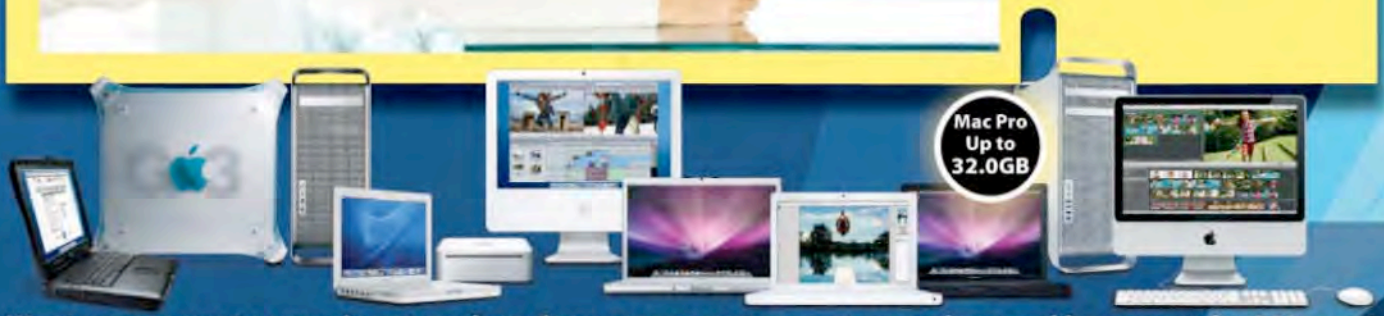

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